



Environmental
Protection Agency

Ted Strickland, Governor
Lee Fisher, Lt. Governor
Chris Korleski, Director

8/18/2010

Mr. Mark Borer
POET Biorefining - Leipsic
3875 State Route 65
Leipsic, OH 45856

RE: FINAL AIR POLLUTION PERMIT-TO-INSTALL AND OPERATE
Facility ID: 0369000051
Permit Number: P0106634
Permit Type: Renewal
County: Putnam

Dear Permit Holder:

Enclosed please find a final Air Pollution Permit-to-Install and Operate (PTIO) which will allow you to install, modify, and/or operate the described emissions unit(s) in the manner indicated in the permit. Because this permit contains conditions and restrictions, please read it very carefully. Please complete a survey at www.epa.ohio.gov/dapc/permitsurvey.aspx and give us feedback on your permitting experience. We value your opinion.

The issuance of this PTI is a final action of the Director and may be appealed to the Environmental Review Appeals Commission pursuant to Section 3745.04 of the Ohio Revised Code. The appeal must be in writing and set forth the action complained of and the grounds upon which the appeal is based. The appeal must be filed with the Commission within thirty (30) days after notice of the Director's action. The appeal must be accompanied by a filing fee of \$70.00, made payable to "Ohio Treasurer Kevin Boyce," which the Commission, in its discretion, may reduce if by affidavit you demonstrate that payment of the full amount of the fee would cause extreme hardship. Notice of the filing of the appeal shall be filed with the Director within three (3) days of filing with the Commission. Ohio EPA requests that a copy of the appeal be served upon the Ohio Attorney General's Office, Environmental Enforcement Section. An appeal may be filed with the Environmental Review Appeals Commission at the following address:

Environmental Review Appeals Commission
309 South Fourth Street, Room 222
Columbus, OH 43215

If you have any questions, please contact Ohio EPA DAPC, Northwest District Office at (419)352-8461 or the Office of Compliance Assistance and Pollution Prevention at (614) 644-3469. This permit can be accessed electronically on the DAPC Web page, www.epa.ohio.gov/dapc, by clicking the "Issued Air Pollution Control Permits" link.

Sincerely,

Michael W. Ahern
Michael W. Ahern, Manager
Permit Issuance and Data Management Section, DAPC

Cc: Ohio EPA-NWDO

Certified Mail

No	TOXIC REVIEW
No	PSD
No	SYNTHETIC MINOR TO AVOID MAJOR NSR
No	CEMS
No	MACT
Yes	NSPS
No	NESHAPS
No	NETTING
No	MAJOR NON-ATTAINMENT
No	MODELING SUBMITTED
Yes	SYNTHETIC MINOR TO AVOID TITLE V
Yes	FEDERALLY ENFORCABLE PTIO (FEPTIO)



FINAL

**Division of Air Pollution Control
Permit-to-Install and Operate
for
POET Biorefining - Leipsic**

Facility ID: 0369000051
Permit Number: P0106634
Permit Type: Renewal
Issued: 8/18/2010
Effective: 8/18/2010
Expiration: 6/22/2014



Division of Air Pollution Control
Permit-to-Install and Operate
for
POET Biorefining - Leipsic

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Authorization

Facility ID: 0369000051
Application Number(s): A0039941
Permit Number: P0106634
Permit Description: Renewal PTIO including appropriate BAT language.
Permit Type: Renewal
Permit Fee: \$0.00
Issue Date: 8/18/2010
Effective Date: 8/18/2010
Expiration Date: 6/22/2014
Permit Evaluation Report (PER) Annual Date: Jan 1 - Dec 31, Due Feb 15

This document constitutes issuance to:

POET Biorefining - Leipsic
3875 State Route 65
Leipsic, OH 45856

of a Permit-to-Install and Operate for the emissions unit(s) identified on the following page.

Ohio EPA District Office or local air agency responsible for processing and administering your permit:

Ohio EPA DAPC, Northwest District Office
347 North Dunbridge Road
Bowling Green, OH 43402
(419)352-8461

The above named entity is hereby granted this Permit-to-Install and Operate for the air contaminant source(s) (emissions unit(s)) listed in this section pursuant to Chapter 3745-31 of the Ohio Administrative Code. Issuance of this permit does not constitute expressed or implied approval or agreement that, if constructed or modified in accordance with the plans included in the application, the described emissions unit(s) will operate in compliance with applicable State and federal laws and regulations.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency


Chris Korleski
Director



Authorization (continued)

Permit Number: P0106634
Permit Description: Renewal PTIO including appropriate BAT language.

Permits for the following Emissions Unit(s) or groups of Emissions Units are in this document as indicated below:

Emissions Unit ID:	F001
Company Equipment ID:	Paved roadways
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	P001
Company Equipment ID:	grain handling
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	P008
Company Equipment ID:	dryer no. 1
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	P012
Company Equipment ID:	emergency generator
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	P801
Company Equipment ID:	fug. VOC emissions
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	P901
Company Equipment ID:	grain receiving
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	P902
Company Equipment ID:	DDCS loadout
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	T001
Company Equipment ID:	190 ethanol tank
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	T002
Company Equipment ID:	denaturant tank
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	T003
Company Equipment ID:	200 ethanol tank
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	T004
Company Equipment ID:	200 ethanol tank



Superseded Permit Number:
General Permit Category and Type: Not Applicable

Emissions Unit ID: T005
Company Equipment ID: denaturant tank
Superseded Permit Number:
General Permit Category and Type: Not Applicable

Group Name: Hammermill

Emissions Unit ID:	P002
Company Equipment ID:	hammermill no. 1
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	P003
Company Equipment ID:	hammermill no. 2
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	P004
Company Equipment ID:	hammermill no. 3
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	P005
Company Equipment ID:	hammermill no. 4
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	P006
Company Equipment ID:	hammermill no. 5
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable

A. Standard Terms and Conditions

1. What does this permit-to-install and operate ("PTIO") allow me to do?

This permit allows you to install and operate the emissions unit(s) identified in this PTIO. You must install and operate the unit(s) in accordance with the application you submitted and all the terms and conditions contained in this PTIO, including emission limits and those terms that ensure compliance with the emission limits (for example, operating, recordkeeping and monitoring requirements).

2. Who is responsible for complying with this permit?

The person identified on the "Authorization" page, above, is responsible for complying with this permit until the permit is revoked, terminated, or transferred. "Person" means a person, firm, corporation, association, or partnership. The words "you," "your," or "permittee" refer to the "person" identified on the "Authorization" page above.

The permit applies only to the emissions unit(s) identified in the permit. If you install or modify any other equipment that requires an air permit, you must apply for an additional PTIO(s) for these sources.

3. What records must I keep under this permit?

You must keep all records required by this permit, including monitoring data, test results, strip-chart recordings, calibration data, maintenance records, and any other record required by this permit for five years from the date the record was created. You can keep these records electronically, provided they can be made available to Ohio EPA during an inspection at the facility. Failure to make requested records available to Ohio EPA upon request is a violation of this permit requirement.

4. What are my permit fees and when do I pay them?

There are two fees associated with permitted air contaminant sources in Ohio:

- PTIO fee. This one-time fee is based on a fee schedule in accordance with Ohio Revised Code (ORC) section 3745.11, or based on a time and materials charge for permit application review and permit processing if required by the Director.

You will be sent an invoice for this fee after you receive this PTIO and payment is due within 30 days of the invoice date. You are required to pay the fee for this PTIO even if you do not install or modify your operations as authorized by this permit.

- Annual emissions fee. Ohio EPA will assess a separate fee based on the total annual emissions from your facility. You self-report your emissions in accordance with Ohio Administrative Code (OAC) Chapter 3745-78. This fee assessed is based on a fee schedule in ORC section 3745.11 and funds Ohio EPA's permit compliance oversight activities. Unless otherwise specified, facilities subject to one or more synthetic minor restrictions must use Ohio EPA's "Air Services" to submit annual emissions associated with this permit requirement. Ohio EPA will notify you when it is time to report your emissions and to pay your annual emission fees.

5. When does my PTIO expire, and when do I need to submit my renewal application?

This permit expires on the date identified at the beginning of this permit document (see "Authorization" page above) and you must submit a renewal application to renew the permit. Ohio EPA will send a renewal notice to you approximately six months prior to the expiration date of this permit. However, it is very important that you submit a complete renewal permit application (postmarked prior to expiration of this permit) even if you do not receive the renewal notice.

If a complete renewal application is submitted before the expiration date, Ohio EPA considers this a timely application for purposes of ORC section 119.06, and you are authorized to continue operating the emissions unit(s) covered by this permit beyond the expiration date of this permit until final action is taken by Ohio EPA on the renewal application.

6. What happens to this permit if my project is delayed or I do not install or modify my source?

This PTIO expires 18 months after the issue date identified on the "Authorization" page above unless otherwise specified if you have not (1) started constructing the new or modified emission sources identified in this permit, or (2) entered into a binding contract to undertake such construction. This deadline can be extended by up to 12 months, provided you apply to Ohio EPA for this extension within a reasonable time before the 18-month period has ended and you can show good cause for any such extension.

7. What reports must I submit under this permit?

An annual permit evaluation report (PER) is required in addition to any malfunction reporting required by OAC rule 3745-15-06 or other specific rule-based reporting requirement identified in this permit. Your PER due date is identified in the Authorization section of this permit.

8. If I am required to obtain a Title V operating permit in the future, what happens to the operating provisions and PER obligations under this permit?

If you are required to obtain a Title V permit under OAC Chapter 3745-77 in the future, the permit-to-operate portion of this permit will be superseded by the issued Title V permit. From the effective date of the Title V permit forward, this PTIO will effectively become a PTI (permit-to-install) in accordance with OAC rule 3745-31-02(B). The following terms and conditions will no longer be applicable after issuance of the Title V permit: Section B, Term 1.b) and Section C, for each emissions unit, Term a)(2).

The PER requirements in this permit remain effective until the date the Title V permit is issued and is effective, and cease to apply after the effective date of the Title V permit. The final PER obligation will cover operations up to the effective date of the Title V permit and must be submitted on or before the submission deadline identified in this permit on the last day prior to the effective date of the Title V permit.

9. What are my obligations when I perform scheduled maintenance on air pollution control equipment?

You must perform scheduled maintenance of air pollution control equipment in accordance with OAC rule 3745-15-06(A). If scheduled maintenance requires shutting down or bypassing any air pollution control equipment, you must also shut down the emissions unit(s) served by the air pollution control equipment during maintenance, unless the conditions of OAC rule 3745-15-06(A)(3) are met. Any emissions that exceed permitted amount(s) under this permit (unless specifically exempted by rule) must be reported as deviations in the annual permit evaluation report (PER), including nonexempt excess emissions that occur during approved scheduled maintenance.

10. Do I have to report malfunctions of emissions units or air pollution control equipment? If so, how must I report?

If you have a reportable malfunction of any emissions unit(s) or any associated air pollution control system, you must report this to the Ohio EPA DAPC, Northwest District Office in accordance with OAC rule 3745-15-06(B). Malfunctions that must be reported are those that result in emissions that exceed

permitted emission levels. It is your responsibility to evaluate control equipment breakdowns and operational upsets to determine if a reportable malfunction has occurred.

If you have a malfunction, but determine that it is not a reportable malfunction under OAC rule 3745-15-06(B), it is recommended that you maintain records associated with control equipment breakdown or process upsets. Although it is not a requirement of this permit, Ohio EPA recommends that you maintain records for non-reportable malfunctions.

11. Can Ohio EPA or my local air agency inspect the facility where the emission unit(s) is/are located?

Yes. Under Ohio law, the Director or his authorized representative may inspect the facility, conduct tests, examine records or reports to determine compliance with air pollution laws and regulations and the terms and conditions of this permit. You must provide, within a reasonable time, any information Ohio EPA requests either verbally or in writing.

12. What happens if one or more emissions units operated under this permit is/are shut down permanently?

Ohio EPA can terminate the permit terms associated with any permanently shut down emissions unit. "Shut down" means the emissions unit has been physically removed from service or has been altered in such a way that it can no longer operate without a subsequent "modification" or "installation" as defined in OAC Chapter 3745-31.

You should notify Ohio EPA of any emissions unit that is permanently shut down by submitting¹ a certification that identifies the date on which the emissions unit was permanently shut down. The certification must be submitted by an authorized official from the facility. You cannot continue to operate an emissions unit once the certification has been submitted to Ohio EPA by the authorized official.

You must comply with all recordkeeping and reporting for any permanently shut down emissions unit in accordance with the provisions of the permit, regulations or laws that were enforceable during the period of operation, such as the requirement to submit a PER, air fee emission report, or malfunction report. You must also keep all records relating to any permanently shutdown emissions unit, generated while the emissions unit was in operation, for at least five years from the date the record was generated.

Again, you cannot resume operation of any emissions unit certified by the authorized official as being permanently shut down without first applying for and obtaining a permit pursuant to OAC Chapter 3745-31.

13. Can I transfer this permit to a new owner or operator?

You can transfer this permit to a new owner or operator. If you transfer the permit, you must follow the procedures in OAC Chapter 3745-31, including notifying Ohio EPA or the local air agency of the change in ownership or operator. Any transferee of this permit must assume the responsibilities of the transferor permit holder.

14. Does compliance with this permit constitute compliance with OAC rule 3745-15-07, "air pollution nuisance"?

This permit and OAC rule 3745-15-07 prohibit operation of the air contaminant source(s) regulated

¹ Permittees that use Ohio EPA's "Air Services" can mark the affected emissions unit(s) as "permanently shutdown" in the facility profile along with the date the emissions unit(s) was permanently removed and/or disabled. Submitting the facility profile update will constitute notifying of the permanent shutdown of the affected emissions unit(s).

Final Permit-to-Install and Operate

POET Biorefining - Leipsic

Permit Number: P0106634

Facility ID: 0369000051

Effective Date: 8/18/2010

under this permit in a manner that causes a nuisance. Ohio EPA can require additional controls or modification of the requirements of this permit through enforcement orders or judicial enforcement action if, upon investigation, Ohio EPA determines existing operations are causing a nuisance.

15. What happens if a portion of this permit is determined to be invalid?

If a portion of this permit is determined to be invalid, the remainder of the terms and conditions remain valid and enforceable. The exception is where the enforceability of terms and conditions are dependent on the term or condition that was declared invalid.

B. Facility-Wide Terms and Conditions

Final Permit-to-Install and Operate

POET Biorefining - Leipsic

Permit Number: P0106634

Facility ID: 0369000051

Effective Date: 8/18/2010

1. This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).
 - a) For the purpose of a permit-to-install document, the facility-wide terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.
 - (1) None.
 - b) For the purpose of a permit-to-operate document, the facility-wide terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.
 - (1) None.

C. Emissions Unit Terms and Conditions

1. F001, Paved roadways

Operations, Property and/or Equipment Description:

Paved roadways and parking areas

- a) This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).
 - (1) For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.
 - a. None.
 - (2) For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.
 - a. None.
- b) Applicable Emissions Limitations and/or Control Requirements
 - (1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3)	There shall be no visible particulate emissions (PE), except for one minute during any 60-minute period. Fugitive PE shall not exceed 15.46 tons per year. The permittee shall implement best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust [See b)(2)b. through b)(2)f.]
b.	OAC rule 3745-31-05(A)(3), as effective 11/30/01	2.06 tons fugitive particulate matter less than 10 microns in diameter (PM10)/yr See b)(2)g.
c.	OAC rule 3745-31-05(A)(3)(a)(ii), as effective 12/01/06	See b)(2)h.
d.	OAC rule 3745-17-07(B)	See b)(2)i

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
e.	OAC rule 3745-17-08(B)	See b)(2)j.

(2) Additional Terms and Conditions

- a. The paved roadways and parking areas that are covered by this permit and subject to the above-mentioned requirements are listed below:

Paved Roadways:

All

Paved Parking Areas:

All

- b. The permittee shall employ best available control measures on all paved roadways and parking areas for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permit application, the permittee has committed to treat the paved roadways and parking areas by sweeping and/or watering at sufficient treatment frequencies to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other equally-effective control measures to ensure compliance.
- c. The needed frequencies of implementation of the control measures shall be determined by the permittee's inspections pursuant to the monitoring section of this permit. Implementation of the control measures shall not be necessary for a paved roadway or parking area that is covered with snow and/or ice or if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements. Implementation of any control measure may be suspended if unsafe or hazardous driving conditions would be created by its use.
- d. The permittee shall promptly remove, in such a manner as to minimize or prevent resuspension, earth and/or other material from paved streets onto which such material has been deposited by trucking or earth moving equipment or erosion by water or other means.
- e. Open-bodied vehicles transporting materials likely to become airborne shall have such materials covered at all times if the control measure is necessary for the materials being transported.
- f. Implementation of the above-mentioned control measures in accordance with the terms and conditions of this permit is appropriate and sufficient to satisfy the best available technology requirements of OAC rule 3745-31-05.
- g. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to OAC rule 3745-31-05(A)(3), as effective, November 30, 2001, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was

revised to conform to ORC changes effective August 3, 2006 (S.B. 265 changes), such that BAT is no longer required by State regulations for NAAQS pollutant less than ten tons per year. However, that rule revision has not yet been approved by U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006 version of 3745-31-05, then these emission limits/control measures no longer apply.

- h. This rule paragraph applies once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05 as part of the State Implementation Plan.

This emissions unit potential to emit for PM10 is less than 10 tons per year*. Therefore, pursuant to ORC 3704.03(T)(4), OAC rule 3745-31-05(A)(3) is not applicable.

* The potential to emit for this emissions unit is 3.01 tons PM10/yr based upon the calculations in USEPA, AP-42, Section 13.2.1.3.

- i. This emissions unit is exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07(B) pursuant to OAC rule 3745-17-07(B)(11)(e).
- j. This emissions unit is not located within an "Appendix A" area as identified in OAC rule 3745-17-08. Therefore, pursuant to OAC rule 3745-17-08(A), this emissions unit is exempt from the requirements of OAC rule 3745-17-08(B).

c) Operational Restrictions

- (1) None.

d) Monitoring and/or Recordkeeping Requirements

- (1) Except as otherwise provided in this section, the permittee shall perform inspections of the paved roadways and parking areas in accordance with the following frequencies:

<u>Paved Roadway</u>	<u>Minimum Inspection Frequency</u>
All	Once Per Day
<u>Paved Parking Areas</u>	<u>Minimum Inspection Frequency</u>
All	Once Per Day

- (2) The purpose of the inspections is to determine the need for implementing the above-mentioned control measures. The inspections shall be performed during representative, normal traffic conditions. No inspection shall be necessary for a roadway or parking area that is covered with snow and/or ice or if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements. Any required inspection that is not performed due to any of the above-identified events

shall be performed as soon as such event(s) has (have) ended, except if the next required inspection is within one week.

- (3) The permittee shall maintain records of the following information:
- a. the date and reason any required inspection was not performed, including those inspections that were not performed due to snow and/or ice cover or precipitation;
 - b. the date and time of each inspection where it was determined by the permittee that it was necessary to implement the control measures;
 - c. the dates the control measures were implemented; and
 - d. on a calendar quarter basis, the total number of days the control measures were implemented and the total number of days where snow and/or ice cover or precipitation were sufficient to not require the control measures.

The information required in d)(3)d. shall be updated on a calendar quarter basis within 30 days after the end of each calendar quarter.

- (4) The permittee shall record the number of trucks hauling grain, ethanol, denaturant, and/or DDGS entering the plant site and their respective weights on a daily basis.

e) Reporting Requirements

- (1) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.
- (2) The permittee shall identify in the annual PER the following occurrences concerning the inspection and control measure requirements:
 - a. Each day during which an inspection was not performed by the required frequency, excluding an inspection which was not performed due to an exemption for snow and/or ice cover or precipitation; and
 - b. Each instance when a control measure, that was to be implemented as a result of an inspection, was not implemented.

f) Testing Requirements

- (1) Compliance with the emission limitations in Section b)(1) of these terms and conditions shall be determined in accordance with the following methods:
 - a. Emission Limitation:
There shall be no visible PE, except for one minute during any 60-minute period.

Applicable Compliance Method:

Visible PE shall be determined according to test Method 22 as set forth in the "Appendix on Test Methods" in 40 CFR Part 60 ("Standards of Performance for New Stationary Sources").

b. Emission Limitation:

Fugitive PE shall not exceed 15.46 tons/year.

Applicable Compliance Method:

Compliance with the annual emission limitation may be demonstrated using calculations in AP-42, Section 13.2.1.3 (11/06) and inputs representing the potential to emit, as follows:

$$E = k[(sL/2)^{0.65} (W/3)^{1.5} - C] (1-P/4N)$$

Where

E = emission factor (lb/VMT)

k = particle size multiplier = 0.082

sL = silt content of road surface material, in g/m² = 0.4 (80% control applied)

W = mean vehicle weight, in tons = 27.5

P = number of wet days per averaging period = 140

N = number of days per averaging period = 365

Using the equation and input values above:

$$E = 0.72 \text{ lb PE/vehicle mile traveled (VMT)}$$

Using the AP-42 emission factor and the maximum annual VMT:

$$\begin{aligned} PE &= (0.72 \text{ lb/VMT})(42,953 \text{ VMT/yr})(0.0005 \text{ ton/lb}) \\ &= 15.46 \text{ tons/year} \end{aligned}$$

c. Emission Limitation:

2.06 tons fugitive PM10/yr

Applicable Compliance Method:

Compliance with the annual emission limitation may be demonstrated using calculations in AP-42, Section 13.2.1.3 (11/06) and inputs representing the potential to emit, as follows:

$$E = k[(sL/2)^{0.65} (W/3)^{1.5} - C] (1-P/4N)$$

Where

E = emission factor (lb/VMT)

k = particle size multiplier = 0.016

sL = silt content of road surface material, in g/m² = 0.4 (80% control applied)

W = mean vehicle weight, in tons = 27.5

P = number of wet days per averaging period = 140

N = number of days per averaging period = 365

Using the equation and input values above:

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$E = 0.096 \text{ lb PE/vehicle mile traveled (VMT)}$

Using the AP-42 emission factor and the maximum annual VMT:

$PE = (0.096 \text{ lb/VMT})(42,953 \text{ VMT/yr})(0.0005 \text{ ton/lb})$

$= 2.06 \text{ tons/year}$

g) Miscellaneous Requirements

(1) None.

2. P001, grain handling

Operations, Property and/or Equipment Description:

Grain handling and surge/storage bin

- a) This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).
 - (1) For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.
 - a. None.
 - (2) For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.
 - a. None.
- b) Applicable Emissions Limitations and/or Control Requirements
 - (1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(F)	Particulate matter equal to or less than 10 microns in size (PM10) shall not exceed 0.004 grain per dry standard cubic foot (gr/dscf) and 0.086 lb PM10/hr and 0.38 ton PM10/yr Visible particulate emissions (PE) from the baghouse stack(s) shall not exceed 0% opacity, as a six-minute average. See b)(2)a. and c)(1)
b.	OAC rule 3745-31-05(A)(3), as effective 11/30/01	See b)(2)b. and b)(2)c.
c.	OAC rule 3745-31-05(A)(3)(a)(ii), as effective 12/01/06	See b)(2)d.
d.	OAC rule 3745-17-11(B)	See b)(2)e.
e.	OAC rule 3745-17-07(A)	See b)(2)f.
d.	40 CFR Part 60 Subpart DD	See b)(2)g.

(2) Additional Terms and Conditions

- a. This permit establishes the following voluntary restrictions for the purpose of establishing legally and practically enforceable limitations representing the potential to emit (PTE). These emission limitations are based on the operational restrictions contained in c)(1) which require control equipment:

- i. 0.086 lb PM10/hr and 0.38 ton PM10/yr; and
- ii. Visible particulate emissions shall not exceed 0% opacity, as a six-minute average.

All particulate matter emissions from the baghouse stack are PM10.

- b. BAT requirements for this emissions unit have been determined to be compliance with the voluntary restrictions established in accordance with OAC rule 3745-31-05(F) [See b)(2)a.]. The voluntary restrictions were intentionally established to be consistent with the BAT requirements under OAC rule 3745-31-05(A)(3), as effective 11/30/01 for two specific purposes as indicated below:

- i. BAT requirements under OAC rule 3745-31-05(A)(3), as effective 11/30/01 would be fulfilled by compliance with voluntary restrictions; and
- ii. The emissions unit will avoid any BAT requirements under OAC rule 3745-31-05(A)(3), as effective 12/01/06 [See b)(2)d.].

- c. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to OAC rule 3745-31-05(A)(3), as effective, November 30, 2001, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to ORC changes effective August 3, 2006 (S.B. 265 changes), such that BAT is no longer required by State regulations for NAAQS pollutant less than ten tons per year. However, that rule revision has not yet been approved by U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006 version of 3745-31-05, then these emission limits/control measures no longer apply.

- d. This rule paragraph applies once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05 as part of the State Implementation Plan.

The permit to install (PTI) takes into account the use of a baghouse system (with a 100% capture efficiency and a maximum outlet grain loading of 0.004 gr PM10/dscf) to control PM10 emissions, whenever this air contaminant source is in operation, as a voluntary restriction as proposed by the permittee for the purpose of avoiding Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3).

- e. The uncontrolled mass rate of particulate emissions from this emissions unit is less than 10 lbs/hr. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(ii), Figure

II of OAC rule 3745-17-11 does not apply. Also, Table I does not apply because the facility is located in Putnam County.

- f. This emissions unit is exempt from the visible emissions limitations specified in OAC rule 3745-17-07(A), pursuant to OAC rule 3745-17-07(A)(3)(h), because OAC rule 3745-17-11 is not applicable.
- g. 40 CFR Part 60, Subpart DD (Standards of Performance for Grain Elevators), is applicable to grain storage elevators at any wheat flour mill, wet corn mill, dry corn mill (human consumption), rice mill, or soybean oil extraction plant with a permanent grain storage capacity greater than 1.0 million U.S. bushels. The permanent grain storage capacity of this facility is 1.34 bushels, but the facility is classified as a dry corn chemical manufacturing (not for human consumption). Therefore, 40 CFR Part 60, Subpart DD, is not applicable.

c) Operational Restrictions

- (1) The following operational restriction has been included in this permit for the purpose of establishing legally and practically enforceable limitation requirements which limit PTE [See b)(2)a.]
 - a. This emissions unit shall be vented to the baghouse achieving a maximum concentration of 0.004 gr/dscf of PM10.
- (2) The permittee shall operate the baghouse at all times when this emissions unit is in operation.

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the baghouse stacks serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log, as well as the date and time the daily check was performed. If visible emissions are observed, the permittee shall also note the following in the operations log:
 - a. the color of the emissions;
 - b. the total duration of any visible emission incident; and
 - c. any corrective actions taken to eliminate the visible emissions.

e) Reporting Requirements

- (1) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.

- (2) The permittee shall identify the following information in the annual permit evaluation report in accordance with the monitoring requirements for visible emissions in term number d)(1) above:
 - a. All days during which any visible particulate emissions were observed from the stack serving this emission unit; and
 - b. Any corrective actions taken to eliminate the visible particulate emissions.

f) Testing Requirements

- (1) The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
 - a. The emission testing shall be conducted within 6 months prior to permit expiration.
 - b. The emission testing shall be conducted to:
 - i. demonstrate compliance with the baghouse grain loading of 0.004 gr PM10/dscf.
 - c. The following test methods shall be employed to demonstrate compliance with the above emissions limitations: for PM10, 40 CFR Part 51, Appendix M, Methods 201 and 202 and 40 CFR Part 60, Appendix A, Methods 1-4 (for volumetric air flow rate). Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA, NWDO.
 - d. The test(s) shall be conducted while the emissions unit is operating at its maximum capacity, unless otherwise specified or approved by the Ohio EPA, NWDO.
 - e. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Ohio EPA, NWDO. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA, NWDO's refusal to accept the results of the emission test(s).

Personnel from the Ohio EPA, NWDO shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report of the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Ohio EPA, NWDO within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Ohio EPA, NWDO.

(2) Compliance with the emission limitations specified in Section b)(1) of the terms and conditions of this permit shall be determined in accordance with the following method(s):

a. Emission Limitation:

The baghouse shall achieve a maximum outlet concentration of not greater than 0.004 gr PM10/dscf of exhaust gas.

Applicable Compliance Method:

Compliance with the grain loading of 0.004 gr/dscf shall be demonstrated based on the results of emission testing conducted in accordance with Methods 201 and 202 of 40 CFR Part 51, Appendix M.

b. Emission Limitation:

0.86 lb PM10/hr; 0.38 ton PM10/yr

Applicable Compliance Method:

Compliance with the hourly emission limitation shall be determined by multiplying a maximum grain outlet of 0.004 gr/dscf by 2500 cfm and applying the appropriate conversion factors of 1 lb/7000 gr and 60 min/hr.

Compliance with the annual allowable PM10 emission limitation shall be determined multiplying the lb/hr emission limitation by a maximum operating schedule of 8760 hrs/yr and dividing by 2000 lb/ton. Therefore, provided compliance with the hourly emission limitation is demonstrated, compliance with the annual emission limitation shall also be demonstrated.

If required, the permittee shall demonstrate compliance with the hourly limitation in accordance with Methods 201 and 202 of 40 CFR Part 51, Appendix M.

c. Emission Limitation:

Visible PE from the baghouse stack(s) shall not exceed 0% opacity, as a six-minute average.

Applicable Compliance Method:

Compliance with the visible emission limitation shall be demonstrated in accordance with Test Method 9 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources").

g) Miscellaneous Requirements

(1) None.

3. P008, Dryer no. 1

Operations, Property and/or Equipment Description:

Dryer no. 1 (60 mmBtu/hr natural gas fired) controlled with a regenerative thermal oxidizer

a) This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).

(1) For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.

a. d)(4).

(2) For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.

a. None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3)	See b)(2)a. <u>Emissions limits during normal operation:</u> Normal operation is defined as periods when the regenerative thermal oxidizer (RTO) is in operation and providing air pollution control to emissions unit P007, P008 and P009. Nitrogen oxides (NO _x) emissions from emissions units P007, P008 and P009, combined, shall not exceed 11.0 lb/hr and 48.20 tons per year (TPY). Carbon monoxide (CO) emissions from P007, P008 and P009, combined, shall not exceed 10.47 lbs/hr and 45.86 TPY. Particulate emission equal to or less than 10 microns in size (PM10) emissions

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	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		<p>from P007, P008 and P009, combined, shall not exceed 6.90 lb/hr and 30.22 TPY [See b)(2)b.]</p> <p>Volatile organic compound (VOC) emissions from P007, P008 and P009, combined, shall not exceed 10.34 lbs/hr and 45.29 TPY.</p> <p>Visible particulate emissions (PE) from the RTO stack shall not exceed 5% opacity as a six-minute average.</p> <p><u>Emission limits during unscheduled downtime of the RTO:</u></p> <p>See c)(2)</p>
b.	OAC rule 3745-31-05(A)(3), as effective 11/30/01	<p>Sulfur dioxide (SO₂) emissions from P001, P008, and P009 combined, shall not exceed 0.09 lb SO₂/hr and 0.39 ton SO₂/yr.</p> <p>See b)(2)c.</p>
c.	OAC rule 3745-31-05(A)(3)(a)(ii), as effective 12/01/06	See b)(2)d.
d.	OAC rule 3745-17-07(A)	See b)(2)e.
e.	OAC rule 3745-17-11(B)	See b)(2)e.
f.	OAC rule 3745-114-01 ORC 3704.03(F)	See d)(4)

(2) Additional Terms and Conditions

a. Best available technology (BAT) control requirements for this emissions unit has been determined to be use of the following:

i. a regenerative thermal oxidizer. The regenerative thermal oxidizer shall meet a minimum control efficiency of 98% for VOC emissions, 90% for CO emissions and 90% for PM10*.

*The control of PM10 includes a multiclone for removal of PM10 (as dried product) prior to entering the RTO. The control system shall result in a PM10 mass emission rate not to exceed 6.93 lbs/hr from the RTO.

b. All PE is considered to be PM10.

c. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to OAC rule 3745-31-05(A)(3), as effective, November 30, 2001, in this

permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to ORC changes effective August 3, 2006 (S.B. 265 changes), such that BAT is no longer required by State regulations for NAAQS pollutant less than ten tons per year. However, that rule revision has not yet been approved by U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006 version of 3745-31-05, then these emission limits/control measures no longer apply.

- d. This rule paragraph applies once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05 as part of the State Implementation Plan.

The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the SO₂ emissions from this air contaminant source since the uncontrolled potential to emit (PTE) for SO₂ emissions is less than 10 tpy. Actual PTE for SO₂ is 0.39 tpy.

- e. The emission limitations specified by this rule are less stringent than the emission limitations established pursuant to OAC rule 3745-31-05(A)(3).

c) Operational Restrictions

- (1) The permittee shall burn only natural gas in this emissions unit.
- (2) The permittee shall shut down this emissions unit and emissions unit P009 when the RTO experiences an unscheduled shutdown. This emissions unit and P009 will be allowed to operate to complete the drying of any material contained in the emissions units at the time of the unscheduled RTO shutdown. No additional material shall be fed to these emissions units during an unscheduled shutdown of the RTO.

d) Monitoring and/or Recordkeeping Requirements

- (1) For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.
- (2) The permittee shall properly install, operate, and maintain equipment to continuously monitor and record the combustion temperature within the thermal oxidizer during operation of this emissions unit. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the combustion temperature within the thermal oxidizer on a continuous basis.

Whenever the monitored value for the combustion temperature deviates from the value specified below, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation: the date and time the deviation began and the magnitude of the deviation at that time, the date(s) the investigation was conducted, the names of the personnel who conducted the investigation, and the findings and recommendations.

In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable value specified below, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken: a description of the corrective action, the date it was completed, the date and time the deviation ended, the total period of time (in minutes) during which there was a deviation, the combustion temperature within the thermal oxidizer immediately after the corrective action, and the names of the personnel who performed the work. Investigation and records required by this paragraph does not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

The average combustion temperature within the thermal incinerator, for any 3-hour block of time when the emissions unit is in operation, shall not be more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit was in compliance.

This value is effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the appropriate Ohio EPA District Office or local air agency.

- (3) The permittee shall maintain a record of all instances when emissions unit P008 and/or P009 were in operation when the RTO was shut down [See c)(2)].
- (4) The permit to install for Emission Units B001, B002, P007, P008, P009 and P010 were evaluated based on the actual materials and the design parameters of each emissions unit's exhaust system, as specified by the permittee in the permit to install application. Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by these emissions units using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: Acetaldehyde

TLV (mg/m³): 33.2

Maximum Hourly Emission Rate (lbs/hr): 7.50 (permit total)

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m³): 0.742

MAGLC (ug/m³): 790

Pollutant: Hexane

TLV (mg/m³): 176.23

Maximum Hourly Emission Rate (lbs/hr): 0.57 (permit total)

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m³): 0.08

MAGLC (ug/m³): 4,196

Physical changes to or changes in the method of operation of the emissions units after installation or modification could affect the parameters used to determine whether or not the "Air Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:

- a. Changes in the composition of the materials used, or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;
- b. Changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and
- c. Physical changes to the emissions unit or its exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01 solely due to the emissions of any type of air toxic contaminant not previously emitted, and a modification of the existing permit to install will not be required, even if the toxic air contaminant emissions are greater than the de minimis level in OAC rule 3745-15-05. If the change(s) is (are) defined as a modification under other provisions of the modification definition, then the permittee shall obtain a final permit to install prior to the change.

The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic Policy:"

- a. A description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);
- b. Documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and
- c. Where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

e) Reporting Requirements

- (1) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director by the due date

identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.

- (2) The permittee shall identify as part of the PER the following information concerning the operation of the control equipment during the operation of this emissions unit:
 - a. All 3-hour blocks of time during which the average combustion temperature within the thermal incinerator, when the emissions unit was in operation, was more than 50 degrees Fahrenheit below the average temperature during the most recent performance test that demonstrated the emissions unit was in compliance;
 - b. An identification of each incident of deviation described in e)(2)a. where a prompt investigation was not conducted;
 - c. An identification of each incident of deviation described in e)(2)a. where prompt corrective action, that would bring the combustion temperature into compliance with the acceptable range, was determined to be necessary and was not taken; and
 - d. An identification of each incident of deviation described in e)(2)a. where proper records were not maintained for the investigation and/or the corrective action.
- (3) The permittee shall identify in the annual PER all instances when emissions units P008 and/or P009 were in operation when the RTO was shut down [See c)(2)]. These reports shall be submitted within 30 days after the deviation occurs.

f) **Testing Requirements**

- (1) The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
 - a. The emission testing shall be conducted within 6 months prior to permit expiration.
 - b. The emission testing shall be conducted to demonstrate compliance with the NO_x, CO, VOC, and PM₁₀ mass emissions limitations from the regenerative thermal oxidizer controlling this emissions unit. Emission testing shall also be conducted to demonstrate compliance with the control efficiency limitation for VOCs from the scrubber controlling this emissions unit, and for the control efficiency limitation for VOCs from the regenerative thermal oxidizer controlling this emissions unit. Emission testing shall also be conducted to verify the expected emissions for single and combined HAPs.
 - c. The following test methods shall be employed to demonstrate compliance with the above emission limitations:
 - i. for PM₁₀, Methods 201/201A and 202 of 40 CFR Part 51, Appendix M;
 - ii. for NO_x, Methods 1-4 and 7 of 40 CFR Part 60, Appendix A;

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- iii. for CO, Methods 1-4 and 10 of 40 CFR Part 60, Appendix A;
- iv. for VOC Methods 1-4 and 18, 25 or 25a of 40 CFR Part 60, Appendix A. Appropriate methods shall be used in conjunction with the test methods and procedures specified in Methods 18, 25, or 25A of 40 CFR Part 60, Appendix A for determining VOC mass emissions; and
- v. for HAPs (acetaldehyde, hexane, formaldehyde, acrolein, methanol, toluene, xylenes), Methods 18 or 320 from 40 CFR Part 60, Appendix A.

Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA, NWDO. The test method(s) which must be employed to demonstrate compliance with the control efficiencies are specified below.

- d. The control efficiency (i.e., the percent reduction in mass emissions between the inlet and outlet of the control system) shall be determined in accordance with the test methods and procedures specified in Methods 18, 25, or 25A of 40 CFR Part 60, Appendix A for VOC emissions. The test methods and procedures selected shall be based on a consideration of the diversity of the organic species present and their total concentration, and on a consideration of the potential presence of interfering gases."
- e. The test(s) shall be conducted while the emissions unit is operating at its maximum capacity, unless otherwise specified or approved by the Ohio EPA, NWDO.
- f. During emission testing, the permittee shall also record the average combustion temperature within the thermal incinerator, in degrees Fahrenheit.
- g. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Ohio EPA, NWDO. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA, NWDO's refusal to accept the results of the emission test(s).

Personnel from the Ohio EPA, NWDO shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report of the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Ohio EPA, NWDO within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Ohio EPA, NWDO.

- (2) Compliance with the emission limitations in Section b)(1) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitations:

10.34 lb VOC/hr, 45.29 tpy VOC (for emissions units P007, P008, and P009, combined)

11.0 lb NO_x/hr, 48.20 tpy NO_x (for emissions units P007, P008, and P009, combined)

10.47 lb CO/hr, 45.86 tpy CO (for emissions units P007, P008, and P009, combined)

6.90 lb PM10/hr, 30.22 tpy PM10 (for emissions units P007, P008, and P009, combined)

Applicable Compliance Method:

Compliance with the hourly allowable emission limitations above shall be demonstrated based on the results of emission testing conducted in accordance with the following:

i. for PM10, Methods 201/201A and 202 of 40 CFR Part 51, Appendix M;

ii. for NO_x, Methods 1-4 and 7 of 40 CFR Part 60, Appendix A;

iii. for CO, Methods 1-4 and 10 of 40 CFR Part 60, Appendix A; and

iv. for VOC Methods 1-4 and 18, 25 or 25a of 40 CFR Part 60, Appendix A.

The annual emission limitations were developed by multiplying the respective hourly emission limitation by the maximum operating schedule of 8760 hours/year, and then dividing by 2000 lb/ton. Therefore, provided compliance is shown with the hourly limitation, compliance with the annual limitation shall also be demonstrated.

b. Emission Limitation:

0.09 lb SO₂/hr; 0.39 tpy SO₂ (for emissions units P007, P008, and P009, combined)

Applicable Compliance Method:

The hourly allowable emission limitation was developed by multiplying the USEPA, AP-42 emission factor, Table 1.4-2 of 0.6 lb SO₂/mm scf by the maximum hourly natural gas consumption rate of 1.25 mm scf/hr.

The annual SO₂ emission limitation was developed by multiplying the hourly emission limitation in lb/hr by the maximum operating schedule of 8760 hrs/yr and dividing by 2000 lb/ton. Therefore, provided compliance is shown with the hourly limitation, compliance with the annual limitation shall also be demonstrated.

If required, compliance with the hourly allowable emission limitations above shall be demonstrated based on the results of emission testing conducted in accordance with Methods 1-4 and 6 of 40 CFR Part 60, Appendix A

c. Emission Limitation:

Visible PE from the RTO stack shall not exceed 5% opacity, as a six-minute average.

Appliance Compliance Method:

Compliance shall be determined according to test Method 9 as set forth in the "Appendix on Test Methods" in 40 CFR Part 60 "Standards of Performance for New Stationary Sources."

d. Emission Limitation:

The regenerative thermal oxidizer shall meet a minimum control efficiency of 98% for VOC emissions, 90% for CO and PM10 emissions.

Applicable Compliance Method:

Compliance with the control efficiency requirements above shall be demonstrated based on the results of emission testing conducted in accordance with the methods outlined in Section f)(1) of this permit.

Compliance with the CO destruction efficiency shall be assumed as long as compliance with the hourly CO mass emission limitation is maintained. [Due to the creation of CO in the RTO, it is not possible to perform testing to demonstrate compliance directly associated with the destruction of CO entering the RTO.]

Compliance with the PM10 control efficiency shall be assumed as long as compliance with the hourly PM10 mass emission limitation is maintained.

g) Miscellaneous Requirements

(1) None.

4. P012, emergency generator

Operations, Property and/or Equipment Description:

2000 kW diesel fired emergency generator

a) This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).

(1) For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.

a. None.

(2) For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.

a. b)(1)b., b)(2)b., c)(2), d)(1), e)(1), f)(1)a. , f)(1)b., f)(1)c. and f)(1)d.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3)	Carbon monoxide (CO) emissions shall not exceed 1.16 lb/hr. Nitrogen oxides (NO _x) emissions shall not exceed 53.27 lb/hr. Volatile organic compound (VOC) emissions shall not exceed 0.93 lb/hr. See b)(2)a.
b.	OAC rule 3745-31-05(D) (synthetic minor to avoid PSD)	CO emissions shall not exceed 0.06 ton per rolling, 12-month period. NO _x emissions shall not exceed 2.66 tons per rolling, 12-month period. VOC emissions shall not exceed 0.05 ton per rolling, 12-month period. See b)(2)b. and c)(2)

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	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
c.	OAC rule 3745-31-05(A)(3), as effective 11/30/01	0.40 lb particulate matter less than 10 microns in size (PM10)/hr; 0.02 ton PM10/yr 10.56 lb sulfur dioxide (SO ₂)/hr; 0.53 ton SO ₂ /yr See b)(2)c.
d.	OAC rule 3745-31-05(A)(3)(a)(ii), as effective 12/01/06	See b)(2)d.
e.	OAC rule 3745-17-07(A)	Visible particulate emissions (PE) shall not exceed 20% opacity, as a six-minute average, except as provided by rule.
f.	OAC rule 3745-17-11(B)(5)(b)	0.062 lb PE/mmBTU of actual heat input
g.	OAC rule 3745-18-06(G)	The maximum emission of SO ₂ shall not exceed 0.5 lb/mmBTU actual heat input.

(2) Additional Terms and Conditions

- a. The requirements of this rule also include compliance with the requirements of OAC rule 3745-31-05(D) and OAC rule 3745-17-11(B)(5)(b).
- b. This permit establishes the following federally enforceable emission limitations based on an hours of operation restriction [See section c)(2)] for purposes of avoiding PSD applicability:
 - i. 2.66 tons NO_x per rolling, 12-month period;
 - ii. 0.06 ton CO per rolling, 12-month period; and
 - iii. 0.05 ton VOC per rolling, 12-month period.
- c. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to OAC rule 3745-31-05(A)(3), as effective, November 30, 2001, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to ORC changes effective August 3, 2006 (S.B. 265 changes), such that BAT is no longer required by State regulations for NAAQS pollutant less than ten tons per year. However, that rule revision has not yet been approved by U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006 version of 3745-31-05, then these emission limits/control measures no longer apply.
- d. This rule paragraph applies once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05 as part of the State Implementation Plan.

The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the PE, PE equal to or less than 10 microns in size (PM10) and sulfur dioxide (SO₂) emissions from this air contaminant source since the calculated annual emission rate for PE, PM10 and SO₂ emissions is less than ten tons per year taking into account the federally enforceable restriction on the hours of operation under OAC rule 3745-31-05(D).

The annual emission rate for this emissions unit is 0.53 TPY of SO₂; determined by multiplying the USEPA, AP-42 emission factor (Table 3.4-1) of 0.004 pounds per horsepower-hour (lb/Hp-hr) by the maximum power output of 2640 Hp, the maximum operating schedule of 100 hours per year and 0.0005 ton/pound.

The annual emission rate for this emissions unit is 0.02 TPY of PM10; determined by multiplying the manufacturer's specified emission factor of 0.075 lbs/Hp-hr by the maximum power output of 2640 Hp, the maximum operating schedule of 100 hours per year and 0.0005 ton/lb. All PE is assumed to be PM10.

c) Operational Restrictions

- (1) The permittee shall combust only distillate fuel oil in this emissions unit.

The oil combusted in this emissions unit shall only be distillate oil (fuel oil numbers 1 or 2, as defined by the American Society for Testing and Materials in ASTM D396-78, 89, 90, 92, 96, or 98, "Standard Specification for Fuel Oils"). The sulfur content of the distillate oil shall contain no more than 0.5 weight percent sulfur.

- (2) The maximum annual hours of operation for this emissions unit shall not exceed 100 hours per year, based upon a rolling 12-month summation of the operating hours. To ensure enforceability during the first 12 calendar months of operation following the issuance of this permit, the permittee shall not exceed the levels specified in the following table:

<u>Month(s)</u>	<u>Maximum Allowable Hours of Operation</u>
1	10
1-2	20
1-3	30
1-4	40
1-5	50
1-6	60
1-12	100

After the first 12 calendar months of operation following the issuance of this permit, compliance with the annual hours of operation limitation shall be based upon a rolling, 12-month summation of the operating hours.

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall maintain monthly records of the following information for this emissions unit:
 - a. the hours of operation;
 - b. the calculated monthly emission rate for CO using the following equation: CO emissions in tons = [hours of operation] x [potential hourly CO emissions] x [1 ton/2000 lb] = [d](1)a.] x [1.16 lb CO] x [1/2000 lb];
 - c. the calculated monthly emission rate for NO_x using the following equation: NO_x emissions [in tons] = [hours of operation] x [potential hourly NO_x emissions] x [1 ton/2000 lb] = [d](1)a.] x (53.27 lb NO_x) x [1/2000 lb];
 - d. the calculated monthly emission rate of VOC using the following equation: VOC emissions [in tons] = [hours of operation] x [potential hourly VOC emissions] x [1 ton/2000 lb] = [d](1)a.] x [0.93 lb VOC] x [1/2000 lb];
 - e. for the first 12 months of operation following the issuance of this permit, the cumulative year-to-date total hours of operation.
 - f. beginning the first month, after the first 12 months of operation following the issuance of this permit, the following summations:
 - i. the rolling, 12-month CO emission rate, in tons;
 - ii. the rolling, 12-month NO_x emission rate, in tons;
 - iii. the rolling, 12-month VOC emission rate, in tons; and
 - iv. the rolling, 12-month number of hours of operation.
- (2) For each day during which the permittee burns a fuel other than diesel fuel the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit. The permittee shall also maintain documentation on the sulfur content of all fuels received.
- (3) The permittee shall use records of fuel supplier certification to demonstrate compliance with the operational restriction in section c)(1). Records of fuel supplier certification shall include the following information:
 - a. The name of the oil supplier; and
 - b. A statement from the oil supplier that the oil complies with the specifications under the definition of distillate oil in c)(1) above.

e) Reporting Requirements

- (1) The permittee shall submit quarterly deviation (excursion) reports which identify the following:
 - a. All exceedances of the rolling, 12-month restriction of 100 hours.
 - b. All exceedances of the rolling, 12-month CO emission limitation of 0.06 tons.

- c. All exceedances of the rolling, 12-month NO_x emission limitation of 2.66 tons.
- d. All exceedances of the rolling, 12-month VOC emission limitation of 0.05 tons.
- e. For the first 12 calendar months of operation following the issuance of this permit, all exceedances of the maximum allowable cumulative hours of operation specified in c)(2).
- f. All exceedances of the sulfur content fuel restriction specified in condition c)(1).

These quarterly deviation (excursion) reports shall be submitted in accordance with the Standard Terms and Conditions of this permit.

- (2) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.

f) Testing Requirements

- (1) Compliance with the emission limitations in Section b)(1) of these terms and conditions shall be determined in accordance with the following methods:

- a. Emission Limitation:
1.16 lb CO/hr

Applicable Compliance Method:

Compliance with the hourly allowable CO emission limitation shall be determined by multiplying an emission factor of 0.20 g/hp-hr (supplied by the manufacturer), a maximum capacity of 2640 hp, and by a conversion factor of lb/453.59 gram.

If required, compliance with the hourly allowable CO emission limitation shall be determined according to test Methods 1-4, and 10, as set forth in the "Appendix on Test Methods" in 40 CFR Part 60 "Standards of Performance for New Stationary Sources."

- b. Emission Limitation:
53.27 lbs NO_x/hr

Applicable Compliance Method:

Compliance with the hourly allowable NO_x emission limitation shall be determined by multiplying an emission factor of 9.16 g/hp-hr (supplied by the manufacturer) by a maximum capacity of 2640 hp, and then by a conversion factor of lb/453.59 gram.

If required, compliance with the hourly allowable NO_x emission limitation shall be determined according to test Methods 1-4, and 7, as set forth in the "Appendix on Test Methods" in 40 CFR Part 60 "Standards of Performance for New Stationary Sources."

- c. Emission Limitation:
0.93 lbs VOC/hr

Applicable Compliance Method:

Compliance with the hourly the hourly allowable VOC emission limitation shall be determined by multiplying an emission factor of 0.16 g/hp-hr (supplied by the manufacturer) by a maximum capacity of 2640 hp, and then by a conversion factor of lb/453.59 gram.

If required, compliance with the hourly allowable VOC emission limitation shall be determined according to test Methods 1-4, and 25 or 25A, as set forth in the "Appendix on Test Methods" in 40 CFR Part 60 "Standards of Performance for New Stationary Sources."

- d. Emission Limitation:
0.06 ton CO per rolling, 12-month period.
2.66 tons NO_x per rolling, 12-month period.
0.05 ton VOC per rolling, 12-month period.

Applicable Compliance Method:

Compliance with the ton per rolling 12-month period emission limitations above shall be demonstrated by the record keeping requirements established in section d)(1) of this permit.

- e. Emission Limitation:
10.56 lbs SO₂/hr and 0.53 ton SO₂/yr

Applicable Compliance Method:

Compliance with the hourly allowable SO₂ emission limitation shall be determined by multiplying an AP-42 emission factor (Table 3.4-1) of 0.004 lb/Hp-hr by the maximum output of 2640 Hp, the maximum operating schedule of 100 hrs/yr and 1 ton/2000 lbs.

The annual emission limitation shall be determined by multiplying the lb SO₂/hr by a maximum operating schedule of 100 hrs/yr and dividing 2000 lbs/ton. Therefore, provided compliance is shown with the hourly limitation, compliance with the annual emission limitation shall also be demonstrated.

If required, compliance with the hourly allowable SO₂ emission limitation shall be determined in accordance with test Methods 1-4 and 6 of 40 CFR, Part 60, Appendix A.

- f. Emission Limitation:
0.40 lbs PM10/hr and 0.02 ton PM10/yr

Applicable Compliance Method:

Compliance with the hourly allowable PM10 emission limitation shall be determined by multiplying an emission factor of 0.075 lbs/Hp-hr (supplied by the manufacturer) by a maximum output of 2640 Hp, the maximum operating schedule of 100 hrs/yr and 1 lb/2000 tons.

The annual emission limitation shall be determined by multiplying the lb PM₁₀/hr by a maximum operating schedule of 100 hrs/yr and dividing 2000 lbs/ton. Therefore, provided compliance is shown with the hourly limitation, compliance with the annual emission limitation shall also be demonstrated.

If required, compliance with the hourly allowable emission limitation shall be determined in accordance with test Methods 1-4 of 40 CFR, Part 60, Appendix A and 201/201A and 202 of 40 CFR, Part 51, Appendix M.

- g. Emission Limitation:
0.062 lb PE/mmBTU actual heat input

Applicable Compliance Method:

Compliance shall be based upon an emission factor of 0.062 lb/mmBTU. This emission factor is specified in the U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 3.4, Table 3.4-2 (10/96).

If required, compliance shall be determined in accordance with OAC rule 3745-17-03(B)(10).

- h. Emission Limitation:
Visible PE from the stack serving this emissions unit shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.

Applicable Compliance Method:

Compliance shall be demonstrated in accordance with OAC rule 3745-17-03(B)(1).

g) Miscellaneous Requirements

- (1) The following terms and conditions are federally enforceable: b)(1)b., b)(2)b., c)(2), d)(1), e)(1), f)(1)a. , f)(1)b., f)(1)c. and f)(1)d.

5. P801, Fug. VOC emissions

Operations, Property and/or Equipment Description:

Fugitive VOC emissions

- a) This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).
 - (1) For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.
 - a. None.
 - (2) For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.
 - a. None.
- b) Applicable Emissions Limitations and/or Control Requirements
 - (1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3)	The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-09(DD) and 40 CFR Part 60, Subpart VVa. Volatile organic compound (VOC) emissions shall not exceed 10.10 tons/yr. See b)(2)b.
b.	OAC rule 3745-21-09(DD)	See b)(2)a. and g)(2)
c.	40 CFR Part 60 Subpart VVa (40 CFR 60.480a-489a)	See c)(1), d)(1), e)(1), f)(1), and g)(1)

- (2) Additional Terms and Conditions
 - a. The permittee shall employ best available control measures for the emissions unit for the purpose of ensuring compliance with the above-mentioned applicable requirements. The permittee has committed to implementing a Leak Detection and Repair (LDAR) program to ensure compliance. Nothing in this paragraph

shall prohibit the permittee from employing other equally-effective control measures to ensure compliance.

The permittee shall include the appropriate process equipment and regulated components in the LDAR program. The LDAR program shall comply with the appropriate provisions (including operational restrictions, monitoring and Record keeping, reporting, and testing) of OAC rule 3745-21-09(DD) (Leaks from Process Units that Produce Organic Chemicals) and 40 CFR Part 60, Subpart VV (Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry for Which Construction, Reconstruction, or Modification Commenced After November 7, 2006). In the case of overlapping provisions, the permittee shall comply with the more stringent requirement.

- b. This permit to install takes into account the control efficiencies for components in VOC service based on a 500 ppm leak definition and for components in HAP service based on a 10,000 ppm leak definition.
- c) Operational Restrictions
 - (1) See 40 CFR Part 60, Subpart VVa (40 CFR 60.480a-489a).
- d) Monitoring and/or Recordkeeping Requirements
 - (1) See 40 CFR Part 60, Subpart VVa (40 CFR 60.480a-489a).
- e) Reporting Requirements
 - (1) See 40 CFR Part 60, Subpart VVa (40 CFR 60.480a-489a).
 - (2) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.
- f) Testing Requirements
 - (1) See 40 CFR Part 60, Subpart VVa (40 CFR 60.480a-489a).
 - (2) Compliance with the emission limitation in section b)(1) of these terms and conditions shall be determined in accordance with the following method:
 - a. Emission Limitation:
10.10 tons VOC/yr

Applicable Compliance Method:

Compliance with the annual emission limitation has been determined by the permittee using the estimated component count based on similar ethanol plants and emission factors from 'Protocol for Equipment Leak Emission Estimates', EPA-453/R-95-017, Table 5-2. No testing is specifically required by this permit

but, if appropriate, may be requested pursuant to OAC rule 3745-15-04(A). Such testing would be required to comply with methods described in OAC rule 3745-21-10 for organic compounds.

g) Miscellaneous Requirements

- (1) See 40 CFR Part 60, Subpart VVa (40 CFR 60.480a-489a).
- (2) Within 180 days of the start up of this emissions unit, the permittee shall develop a facility LDAR program. At a minimum, the program shall include all the appropriate process equipment and regulated components that are subject to this program and clearly identify how the permittee will comply with the appropriate provisions (including operational restrictions, monitoring and Record keeping, reporting, and testing) of OAC rule 3745-21-09(DD) and 40 CFR Part 60, Subpart VVa.

6. P901, grain receiving

Operations, Property and/or Equipment Description:

grain receiving, transferring, conveying and storage

- a) This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).
 - (1) For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.
 - a. None.
 - (2) For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.
 - a. None.
- b) Applicable Emissions Limitations and/or Control Requirements
 - (1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(F)	<p><u>Stack Emissions:</u> The baghouse controlling this emissions unit shall achieve an outlet emission rate of not greater than 0.004 grain of particulate emissions equal to or less than 10 microns in size (PM10) per dry standard cubic foot of exhaust gases (gr/dscf).</p> <p>PM10 emissions from P901 and P902, combined, shall not exceed 0.80 lb PM10/yr; 3.52 tons per year (TPY).</p> <p>Visible particulate emissions (PE) from the baghouse stack shall not exceed 0% opacity, as a 6-minute average.</p> <p><u>Fugitive Emissions:</u> Fugitive PE shall not exceed 12.30 TPY.</p>

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	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		Fugitive PM10 emissions shall not exceed 4.03 TPY. Visible fugitive PE shall not exceed 5% opacity, as a 3-minute average, from any truck or rail unloading. Visible fugitive PE shall not exceed 0% opacity, as a 3-minute average, from any grain handling operations. See b)(2)a., b)(2)i., and c)(1)
b.	OAC rule 3745-31-05(A)(3), as effective 11/30/01	See b)(2)b. and b)(2)c.
c.	OAC rule 3745-31-05(A)(3), as effective 12/01/06	See b)(2)d.
d.	OAC rule 3745-17-07(B)	See b)(2)e.
e.	OAC rule 3745-17-08(B)	See b)(2)f.
f.	OAC rule 3745-17-07(A)	See b)(2)g.
g.	OAC rule 3745-17-11(B)	See b)(2)g.
h.	40 CFR Part 60 Subpart DD	See b)(2)h.

(2) Additional Terms and Conditions

- a. This permit establishes the following voluntary restrictions for the purpose of establishing legally and practically enforceable limitations representing the potential to emit (PTE). These emission limitations are based on the operational restriction contained in c)(1) which require control equipment:
 - i. 0.80 lb PM10/yr and 3.52 tons PM10/yr for stack emissions;
 - ii. Visible PE from the baghouse stack shall not exceed 0% opacity, as a six-minute average;
 - iii. 12.30 ton fugitive PE/yr;
 - iv. 4.03 ton fugitive PM10/yr;
 - v. Visible fugitive PE shall not exceed 5% opacity, as a 3-minute average, from any truck or rail unloading; and
 - vi. Visible fugitive PE shall not exceed 0% opacity, as a 3-minute average, from any grain handling operations.
- b. BAT requirements for this emissions unit have been determined to be compliance with the voluntary restrictions established in accordance with OAC rule 3745-31-05(F) [See b)(2)a.]. The voluntary restrictions were intentionally

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established to be consistent with the BAT requirements under OAC rule 3745-31-05(A)(3), as effective 11/30/01 for two specific purposes as indicated below:

- i. BAT requirements under OAC rule 3745-31-05(A)(3), as effective 11/30/01 would be fulfilled by compliance with voluntary restrictions; and
 - ii. The emissions unit will avoid any BAT requirements under OAC rule 3745-31-05(A)(3), as effective 12/01/06 [See b)(2)d.].
- c. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to OAC rule 3745-31-05(A)(3), as effective, November 30, 2001, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to ORC changes effective August 3, 2006 (S.B. 265 changes), such that BAT is no longer required by State regulations for NAAQS pollutant less than ten tons per year. However, that rule revision has not yet been approved by U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006 version of 3745-31-05, then these emission limits/control measures no longer apply.
- d. This rule paragraph applies once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05 as part of the State Implementation Plan.

This permit to install takes into account the use of a baghouse system and a partial enclosure (with a maximum outlet grain loading of 0.004 gr PM10/dscf for the baghouse) to control PM10 emissions, whenever this air contaminant source is in operation, as a voluntary restriction as proposed by the permittee for the purpose of avoiding Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3).

- i. for grain receiving, partial enclosure with aspiration to baghouse (CE001); and
 - ii. for transferring/conveying, the use total enclosure and use of baghouse (CE001).
- e. This emissions unit is exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07(B), pursuant to OAC rule 3745-17-07(B)(11)(e).
- f. This emissions unit is not located within an "Appendix A" area as identified in OAC rule 3745-17-08. Therefore, pursuant to OAC rule 3745-17-08(A), this emissions unit is exempt from the requirements of OAC rule 3745-17-08(B).
- g. The emission limitation specified by these rules is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
- h. 40 CFR Part 60, Subpart DD (Standards of Performance for Grain Elevators), is applicable to grain storage elevators at any wheat flour mill, wet corn mill, dry

corn mill (human consumption), rice mill, or soybean oil extraction plant with a permanent grain storage capacity greater than 1.0 million U.S. bushels. The permanent grain storage capacity of this facility is 1.34 bushels, but the facility is classified as a dry corn chemical manufacturing (not for human consumption). Therefore, 40 CFR Part 60, Subpart DD, is not applicable.

- i. For the purposes of this permit all PE emissions from the stack is considered to be PM10.

c) Operational Restrictions

- (1) The following operational restrictions have been included in this permit for the purpose of establishing legally and practically enforceable limitation requirements which limit PTE [See b)(2)a.]:

- a. This emissions unit shall be vented to a baghouse with a maximum outlet grain loading of 0.004 gr PM10/dscf.

- (2) The maximum, annual amount of grain received shall not exceed 683,280 tons.

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the baghouse stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log, as well as the date and time the daily check was performed. If visible emissions are observed, the permittee shall also note the following in the operations log:

- a. the color of the emissions;
- b. the total duration of any visible emission incident; and
- c. any corrective actions taken to eliminate the visible emissions.

- (2) The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible fugitive particulate emissions from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit. The presence or absence of any visible fugitive emissions shall be noted in an operations log, as well as the date and time the daily check was performed. If visible fugitive emissions are observed, the permittee shall also note the following in the operations log:

- a. the color of the emissions;
- b. whether the emissions are representative of normal operations;
- c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
- d. the total duration of any visible emission incident; and
- e. any corrective actions taken to eliminate the visible emissions.

- (3) The permittee shall maintain monthly records of the amount (tons of grain per month and total tons of grain, to date for the calendar year) material throughput for this emissions unit.

e) Reporting Requirements

- (1) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.
- (2) The permittee shall identify the following in the annual permit evaluation report: (a) identify all days during which any visible particulate emissions were observed from the baghouse stack serving this emissions unit (b) identify all days during which any visible fugitive particulate emissions were observed from the egress points serving this emissions unit (c) describe any corrective actions taken to eliminate the visible particulate emissions from the baghouse stack and (d) describe any corrective actions taken to eliminate the visible fugitive particulate emissions from the egress points serving this emissions unit. These reports shall be submitted to the Ohio EPA, NWDO by January 31 and July 31 of each year and shall cover the previous 6-month period.

f) Testing Requirements

- (1) The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
 - a. The emission testing shall be conducted within 6 months prior to permit expiration.
 - b. The emission testing shall be conducted to demonstrate compliance with the baghouse grain loading of 0.004 gr/dscf.
 - c. The following test methods shall be employed to demonstrate compliance with the above emissions limitations: for PM10, 40 CFR Part 51, Appendix M, Methods 201 and 202. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA, NWDO.
 - d. The test(s) shall be conducted while the emissions unit is operating at its maximum capacity, unless otherwise specified or approved by the Ohio EPA, NWDO.
 - e. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Ohio EPA, NWDO. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA, NWDO's refusal to accept the results of the emission test(s).

Personnel from the Ohio EPA, NWDO shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures

provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report of the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Ohio EPA, NWDO within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Ohio EPA, NWDO.

- (2) Compliance with the emission limitations in Section b)(1) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

0.004 gr PM10/dscf of exhaust gas and 0.80 lb PM10/hr; 3.52 ton PM10/yr

Applicable Compliance Method:

Compliance with the grain loading of 0.004 gr/dscf shall be demonstrated based on the results of emission testing conducted in accordance with Methods 201 and 202 of 40 CFR Part 51, Appendix M and 40 CFR Part 60, Appendix A, Methods 1-4 (volumetric air flow rate). Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA, NWDO.

Compliance with the hourly emission limitation shall be demonstrated by multiplying a factor of 0.004 gr/dscf by 23450 cfm and applying the appropriate conversion factors, 1 lb/7000 gr and 60 min/hr.

Compliance with the annual allowable PM10 emission limitation shall be demonstrated using the following calculation based on the baghouse design and a maximum operating schedule of 8760 hrs/yr:

$$= 0.004 \text{ gr/dscf} \times 1 \text{ lb/7000 gr} \times 23,450 \text{ cfm} \times 60 \text{ min/hour} \times 8760 \text{ hours/yr} \times 0.0005 \text{ ton/lb} = 3.52 \text{ tons/year}$$

Therefore, provided compliance with the hourly limitation is demonstrated, compliance with the annual PM10 limitation shall also be demonstrated.

b. Emission Limitation:

Fugitive PE shall not exceed 12.3 tons/yr, fugitive PM10 shall not exceed 4.03 tons/yr.

Applicable Compliance Method:

Compliance with the annual emission limitations above may be demonstrated by the following calculations using the AP-42 emission factors (Section 9.9.1, March 2003) and the maximum grain throughput.

$$= 683,280 \text{ ton/yr} \times 0.18 \text{ lb PE/ton} \times 0.0005 \text{ ton/lb} \times 0.2 \text{ (80\% capture efficiency)} = 12.30 \text{ tons PE/year}$$

$$= 683,280 \text{ ton/yr} \times 0.059 \text{ lb PM10/ton} \times 0.0005 \text{ ton/lb} \times 0.2 \text{ (80\% capture efficiency)} = 4.03 \text{ tons PM10/year}$$

c. Emission Limitation:

Visible PE from the baghouse stack shall not exceed 0% opacity, as a 6-minute average.

Applicable Compliance Method:

Compliance shall be determined according to test Method 9 as set forth in the "Appendix on Test Methods" in 40 CFR Part 60 "Standards of Performance for New Stationary Sources."

d. Emission Limitation:

Visible fugitive PE shall not exceed 5% opacity, as a 3-minute average, from any truck or rail unloading.

Applicable Compliance Method:

Compliance with the visible emission limitation shall be determined in accordance with Test Method 9 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources"), as such Appendix existed on July 1, 2002, and the modifications listed in paragraphs (B)(3)(a) and (B)(3)(b) of OAC rule 3745-17-03.

e. Emission Limitation:

Visible fugitive PE shall not exceed 0% opacity, as a 3-minute average, from any grain handling operations.

Applicable Compliance Method:

Compliance with the visible emission limitation shall be determined in accordance with Test Method 9 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources"), as such Appendix existed on July 1, 2002, and the modifications listed in paragraphs (B)(3)(a) and (B)(3)(b) of OAC rule 3745-17-03.

g) Miscellaneous Requirements

(1) None.

7. P902, DDGS loadout

Operations, Property and/or Equipment Description:

DDGS loadout

- a) This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).
 - (1) For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.
 - a. None.
 - (2) For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.
 - a. None.
- b) Applicable Emissions Limitations and/or Control Requirements
 - (1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(F)	<p><u>Stack Emissions:</u> The baghouse shall achieve an outlet emission rate of not greater than 0.004 grain of particulate emissions equal to or less than 10 microns in size (PM10) per dry standard cubic foot of exhaust gases (gr/dscf).</p> <p>PM10 from P901 and P902, combined, shall not exceed 0.80 lb PM10/hr; 3.52 tons per year (TPY).</p> <p>Visible particulate emissions (PE) from the baghouse stack shall not exceed 0% opacity as a 6-minute average.</p> <p><u>Fugitive Emissions:</u> Fugitive PE shall not exceed 4.33 TPY.</p> <p>Fugitive PM10 emissions shall not</p>

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		exceed 1.46 TPY. Visible fugitive PE shall not exceed 5% opacity, as a 3-minute average, from DDGS loadout. See b)(2)a., b)(2)e. and c)(1)
b.	OAC rule 3745-31-05(A)(3), as effective 11/30/01	See b)(2)b. and b)(2)c.
c.	OAC rule 3745-31-05(A)(3)(a)(ii), as effective 12/01/06	See b)(2)d.
d.	OAC rule 3745-17-07(B)	See b)(2)f.
e.	OAC rule 3745-17-08(A)	See b)(2)g.
f.	OAC rule 3745-17-07(A)	See b)(2)h.
g.	OAC rule 3745-17-11(B)	See b)(2)h.

(2) Additional Terms and Conditions

- a. This permit establishes the following voluntary restrictions for the purpose of establishing legally and practically enforceable limitations representing the potential to emit (PTE). These emission limitations are based on the operational restriction contained in c)(1) which require control equipment:
- i. 0.80 lb PM10/hr; 3.52 tons PM10/yr for stack emissions; and
 - ii. Visible particulate emissions (PE) from the baghouse stack shall not exceed 0% opacity as a 6-minute average for stack emissions;
 - iii. 4.33 tons fugitive PE/yr;
 - iv. 1.46 tons fugitive PM10/yr; and
 - v. Visible fugitive PE shall not exceed 5% opacity, as a 3-minute average, from DDGS loadout.
- b. BAT requirements for this emissions unit have been determined to be compliance with the voluntary restrictions established in accordance with OAC rule 3745-31-05(F) [See b)(2)a.]. The voluntary restrictions were intentionally established to be consistent with the BAT requirements under OAC rule 3745-31-05(A)(3), as effective 11/30/01 for two specific purposes as indicated below:
- i. BAT requirements under OAC rule 3745-31-05(A)(3), as effective 11/30/01 would be fulfilled by compliance with voluntary restrictions; and
 - ii. The emissions unit will avoid any BAT requirements under OAC rule 3745-31-05(A)(3), as effective 12/01/06 [See b)(2)d.].

- c. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to OAC rule 3745-31-05(A)(3), as effective, November 30, 2001, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to ORC changes effective August 3, 2006 (S.B. 265 changes), such that BAT is no longer required by State regulations for NAAQS pollutant less than ten tons per year. However, that rule revision has not yet been approved by U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006 version of 3745-31-05, then these emission limits/control measures no longer apply.

- d. This rule paragraph applies once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05 as part of the State Implementation Plan.

This permit to install takes into account the use of a baghouse system and a partial enclosure* (with a maximum outlet grain loading of 0.004 gr PM10/dscf for the baghouse) to control PM10 emissions, whenever this air contaminant source is in operation, as a voluntary restriction as proposed by the permittee for the purpose of avoiding Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3).

*for DDGS rail load out, the use of partial enclosures and a baghouse; and for DDGS truck load out, the use of partial enclosure.

- e. For purposes of this permit, all stack PE is considered to be PM10.
- f. This emissions unit is exempt from the visible particulate emission limitation specified in OAC rule 3745-17-07(B), pursuant to OAC rule 3745-17-07(B)(11)(e).
- g. This emissions unit is not located within an "Appendix A" area as identified in OAC rule 3745-17-08. Therefore, pursuant to OAC rule 3745-17-08(A), this emissions unit is exempt from the requirements of OAC rule 3745-17-08(B).
- h. The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(F).

c) **Operational Restrictions**

- (1) The following operational restrictions have been included in this permit for the purpose of establishing legally and practically enforceable limitation requirements which limit PTE [See b)(2)a.]:

- a. This emissions unit shall be vented to a baghouse with a maximum outlet grain loading of 0.004 gr PM10/dscf.

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the baghouse stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log, as well as the date and time the daily check was performed. If visible emissions are observed, the permittee shall also note the following in the operations log:
 - a. the color of the emissions;
 - b. the total duration of any visible emission incident; and
 - c. any corrective actions taken to eliminate the visible emissions.
- (2) The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible fugitive particulate emissions from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit. The presence or absence of any visible fugitive emissions shall be noted in an operations log, as well as the date and time the daily check was performed. If visible fugitive emissions are observed, the permittee shall also note the following in the operations log:
 - a. the color of the emissions;
 - b. whether the emissions are representative of normal operations;
 - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - d. the total duration of any visible emission incident; and
 - e. any corrective actions taken to eliminate the visible emissions.

e) Reporting Requirements

- (1) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.
- (2) The permittee shall identify the following in the annual permit evaluation report: (a) identify all days during which any visible particulate emissions were observed from the baghouse stack serving this emissions unit (b) identify all days during which any visible fugitive particulate emissions were observed from the egress points serving this emissions unit (c) describe any corrective actions taken to eliminate the visible particulate emissions from the baghouse stack and (d) describe any corrective actions taken to eliminate the visible fugitive particulate emissions from the egress points serving this emissions unit. These reports shall be submitted to the Ohio EPA, NWDO by January 31 and July 31 of each year and shall cover the previous 6-month period.

f) Testing Requirements

- (1) The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

Final Permit-to-Install and Operate

POET Biorefining - Leipsic

Permit Number: P0106634

Facility ID: 0369000051

Effective Date: 8/18/2010

- a. The emission testing shall be conducted within 6 months prior to permit expiration.
- b. The emission testing shall be conducted to demonstrate compliance with the baghouse grain loading of 0.004 gr/dscf.
- c. The following test methods shall be employed to demonstrate compliance with the above emissions limitations: for PM10, 40 CFR Part 51, Appendix M, Methods 201 and 202. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA, NWDO.
- d. The test(s) shall be conducted while the emissions unit is operating at its maximum capacity, unless otherwise specified or approved by the Ohio EPA, NWDO.
- e. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Ohio EPA, NWDO. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA, NWDO's refusal to accept the results of the emission test(s).

Personnel from the Ohio EPA, NWDO shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report of the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Ohio EPA, NWDO within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Ohio EPA, NWDO.

- (2) Compliance with the emission limitations in Section b)(1) of these terms and conditions shall be determined in accordance with the following methods:

- a. Emission Limitation:
The baghouse shall achieve an outlet emission rate of not greater than 0.004 grain of particulate emissions per dry standard cubic foot of exhaust gases.

Applicable Compliance Method:

Compliance with the grain loading of 0.004 gr/dscf shall be demonstrated based on the results of emission testing conducted in accordance with Methods 201 and 202 of 40 CFR Part 51, Appendix M. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA, NWDO.

- b. Emission Limitation:
0.80 lb PM10/hr and 3.52 TPY PM10

Applicable Compliance Method:

Compliance with the hourly emission limitation shall be demonstrated by multiplying a factor of 0.004 gr/dscf by 23450 cfm and applying the appropriate conversion factors, 1lb/7000 gr and 60 min/hr.

Compliance with the annual allowable PM10 emission limitation shall be demonstrated using the following calculation based on the baghouse design and a maximum operating schedule of 8760 hrs/yr:

$$= 0.004 \text{ gr/dscf} \times 1 \text{ lb/7000 gr} \times 23,450 \text{ cfm} \times 60 \text{ min/hour} \times 8760 \text{ hours/yr} \times 0.0005 \text{ ton/lb} = 3.52 \text{ tons/year}$$

Therefore, provided compliance with the hourly limitation is demonstrated, compliance with the annual PM10 limitation shall also be demonstrated.

c. Emission Limitation:

Visible particulate emissions from the baghouse stack shall not exceed 0% opacity, as a 6-minute average.

Applicable Compliance Method:

Compliance shall be determined according to test Method 9 as set forth in the "Appendix on Test Methods" in 40 CFR Part 60 "Standards of Performance for New Stationary Sources."

d. Emission Limitation:

Visible fugitive particulate emissions shall not exceed 5% opacity, as a 3-minute average, from DDGS loadout.

Applicable Compliance Method:

Compliance with the visible emission limitation shall be determined in accordance with Test Method 9 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources"), as such Appendix existed on July 1, 2002, and the modifications listed in paragraphs (B)(3)(a) and (B)(3)(b) of OAC rule 3745-17-03.

e. Emission Limitation:

Fugitive PE shall not exceed 4.33 TPY; fugitive PM10 shall not exceed 1.46 TPY.

Applicable Compliance Method:

Compliance with the annual emission limitations above may be demonstrated by the following calculation using the AP-42 emission factor (Section 9.9.1, 5/98) and the maximum grain throughput:

$$= 201,480 \text{ tons/yr} \times 0.086 \text{ lb PM/ton} \times 0.0005 \text{ ton/lb} \times 0.5 \text{ (50\% capture efficiency)} = 4.33 \text{ tons PE/year}$$

$$= 201,480 \text{ tons/yr} \times 0.029 \text{ lbPM}_{10}/\text{ton} \times 0.0005 \text{ ton/lb} \times 0.5 \text{ (50\% capture efficiency)} = 1.46 \text{ tons PM}_{10}/\text{year}$$

g) Miscellaneous Requirements

- (1) None.

8. T001, 190 ethanol tank

Operations, Property and/or Equipment Description:

250,000 gallon storage tank (190 proof ethanol tank)

a) This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).

(1) For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.

a. None.

(2) For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.

a. None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(F)	Volatile organic compounds (VOC) shall not exceed 0.38 ton per year See b)(2)a. and c)(1)
b.	OAC rule 3745-31-05(A)(3), as effective 11/30/01	See b)(2)b. and b)(2)c.
c.	OAC rule 3745-31-05(A)(3)(a)(ii), as effective 12/01/06	See b)(2)d.
d.	40 CFR Part 60 Subpart Kb	See b)(2)r.
e.	OAC rule 3745-21-09(L)	See b)(2)q.

(2) Additional Terms and Conditions

a. This permit establishes the following voluntary restrictions for the purpose of establishing legally and practically enforceable limitations representing the potential to emit (PTE). These emission limitations are based on the operational restriction contained in c)(1) which require control equipment:

i. 0.38 tons VOC/yr;

- ii. A maximum material throughput of 86,000,000 gallons; and
 - iii. The use of an internal floating roof.
- b. BAT requirements for this emissions unit have been determined to be compliance with the voluntary restrictions established in accordance with OAC rule 3745-31-05(F) [See b)(2)a.]. The voluntary restrictions were intentionally established to be consistent with the BAT requirements under OAC rule 3745-31-05(A)(3), as effective 11/30/01 for two specific purposes as indicated below:
- i. BAT requirements under OAC rule 3745-31-05(A)(3), as effective 11/30/01 would be fulfilled by compliance with voluntary restrictions; and
 - ii. The emissions unit will avoid any BAT requirements under OAC rule 3745-31-05(A)(3), as effective 12/01/06 [See b)(2)d.].
- c. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to OAC rule 3745-31-05(A)(3), as effective, November 30, 2001, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to ORC changes effective August 3, 2006 (S.B. 265 changes), such that BAT is no longer required by State regulations for NAAQS pollutant less than ten tons per year. However, that rule revision has not yet been approved by U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006 version of 3745-31-05, then these emission limits/control measures no longer apply.
- d. This rule paragraph applies once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05 as part of the State Implementation Plan.
- Permit to Install 03-17156 for this air contaminant source takes into account the use of an internal floating roof and a maximum material throughput of 86,000,000 gallons to control VOC emissions, whenever this air contaminant source is in operation, as a voluntary restriction as proposed by the permittee for the purpose of avoiding Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3).
- e. The fixed roof storage tank shall be equipped with an internal floating roof.
 - f. The automatic bleeder vents shall be closed at all times except when the roof is floated off or landed on the roof leg supports, and the rim vents, if provided, shall be set to open when the roof is being floated off the roof leg supports or is at the manufacturer's recommended setting.
 - g. All openings, except stub drains, shall be equipped with a cover, seal or lid which is to be in a closed position at all times except when in actual use for tank gauging or sampling.

- h. The internal floating roof shall rest or float on the liquid surface (but not necessarily in complete contact with it) inside a storage vessel that has a fixed roof. The internal floating roof shall be floating on the liquid surface at all times, except during initial fill and during those intervals when the storage vessel is completely emptied or subsequently emptied and refilled. When the roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as rapidly as possible.
- i. Each internal floating roof shall be equipped with one of the following closure devices between the wall of the storage vessel and the edge of the internal floating roof:
 - i. A foam- or liquid-filled seal mounted in contact with the liquid (liquid-mounted seal). A liquid-mounted seal means a foam- or liquid-filled seal mounted in contact with the liquid between the wall of the storage vessel and the floating roof continuously around the circumference of the tank.
 - ii. Two seals mounted one above the other so that each forms a continuous closure that completely covers the space between the wall of the storage vessel and the edge of the internal floating roof. The lower seal may be vapor-mounted, but both must be continuous.
 - iii. A mechanical shoe seal. A mechanical shoe seal is a metal sheet held vertically against the wall of the storage vessel by springs or weighted levers and is connected by braces to the floating roof. A flexible coated fabric (envelope) spans the annular space between the metal sheet and the floating roof.
- j. Each opening in a non-contact internal floating roof except for automatic bleeder vents (vacuum breaker vents) and the rim space vents is to provide a projection below the liquid surface.
- k. Each opening in the internal floating roof except for leg sleeves, automatic bleeder vents, rim space vents, column wells, ladder wells, sample wells, and stub drains is to be equipped with a cover or lid which is to be maintained in a closed position at all times (i.e., no visible gap) except when the device is in actual use. The cover or lid shall be equipped with a gasket. Covers on each access hatch and automatic gauge float well shall be bolted except when they are in use.
- l. Automatic bleeder vents shall be equipped with a gasket and are to be closed at all times when the roof is floating except when the roof is being floated off or is being landed on the roof leg supports.
- m. Rim space vents shall be equipped with a gasket and are to be set to open only when the internal floating roof is not floating or at the manufacturer's recommended setting.

- n. Each penetration of the internal floating roof for the purpose of sampling shall be a sample well. The sample well shall have a slit fabric cover that covers at least 90 percent of the opening.
- o. Each penetration of the internal floating roof that allows for passage of a column supporting the fixed roof shall have a flexible fabric sleeve seal or a gasketed sliding cover.
- p. Each penetration of the internal floating roof that allows for passage of a ladder shall have a gasketed sliding cover.
- q. OAC rule 3745-21-09(L) is not applicable because this tank does not store petroleum liquids as defined in OAC rule 3745-21-01 (E)(13).
- r. The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-02(A).

c) Operational Restrictions

- (1) The following operational restrictions have been included in this permit for the purpose of establishing legally and practically enforceable limitation requirements which limit PTE [See b)(2)a.]:
 - a. This emission unit shall be equipped with an internal floating roof with a maximum material throughput of 86,000,000 gallons.
- (2) The maximum true vapor pressure of organic liquid stored in this storage tank shall not exceed 0.754 pound per square inch absolute.

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall maintain records of the following information:
 - a. The types of petroleum liquids stored in the tank.
 - b. The maximum true vapor pressure (in pounds per square inch absolute), as stored, of each liquid that has a maximum true vapor pressure greater than 0.754 pound per square inch absolute. Available data on the storage temperature may be used to determine the maximum true vapor pressure as in the following:
 - i. For vessels operated above or below ambient temperatures, the maximum true vapor pressure is calculated based upon the highest expected calendar-month average of the storage temperature. For vessels operated at ambient temperatures, the maximum true vapor pressure is calculated based upon the maximum local monthly average ambient temperature as reported by the National Weather Service.
 - ii. For refined petroleum products the vapor pressure may be obtained by the following:
 - (a) Available data on the Reid vapor pressure and the maximum expected storage temperature based on the highest expected

calendar-month average temperature of the stored product may be used to determine the maximum true vapor pressure from nomographs contained in API Bulletin 2517 (incorporated by reference--See Sec. 60.17), unless the Ohio EPA, NWDO specifically requests that the liquid be sampled, the actual storage temperature determined, and the Reid vapor pressure determined from the sample(s).

- (b) The true vapor pressure of each type of crude oil with a Reid vapor pressure less than 13.8 kPa or with physical properties that preclude determination by the recommended method is to be determined from available data and recorded if the estimated maximum true vapor pressure is greater than 3.5 kPa.
- iii. For other liquids, the vapor pressure:
 - (a) May be obtained from standard reference texts, or
 - (b) Determined by ASTM Method D2879-83 (incorporated by reference--See Sec. 60.17); or
 - (c) Measured by an appropriate method approved by the Ohio EPA, NWDO; or
 - (d) Calculated by an appropriate method approved by the Ohio EPA, NWDO.
- (2) Visually inspect the internal floating roof, the primary seal, and the secondary seal (if one is in service), prior to filling the storage vessel with VOL. If there are holes, tears, or other openings in the primary seal, the secondary seal, or the seal fabric or defects in the internal floating roof, or both, the owner or operator shall repair the items before filling the storage vessel.
- (3) For vessels equipped with a liquid-mounted or mechanical shoe primary seal, the permittee shall visually inspect the internal floating roof and the primary seal or the secondary seal (if one is in service) through manholes and roof hatches on the fixed roof at least once every 12 months after initial fill. If the internal floating roof is not resting on the surface of the VOL inside the storage vessel, or there is liquid accumulated on the roof, or the seal is detached, or there are holes or tears in the seal fabric, the owner or operator shall repair the items or empty and remove the storage vessel from service within 45 days. If a failure that is detected during inspections required in this paragraph cannot be repaired within 45 days and if the vessel cannot be emptied within 45 days, a 30-day extension may be requested from Ohio EPA, NWDO in the inspection report required in D.3. Such a request for an extension must document that alternate storage capacity is unavailable and specify a schedule of actions the company will take that will assure that the control equipment will be repaired or the vessel will be emptied as soon as possible.

- (4) For vessels equipped with a double-seal system as specified in b)(2)i.(ii):
 - a. The permittee shall visually inspect the vessel as specified in d)(5) at least every 5 years; or
 - b. The permittee shall visually inspect the vessel as specified in d)(3).
 - (5) The permittee shall visually inspect the internal floating roof, the primary seal, the secondary seal (if one is in service), gaskets, slotted membranes and sleeve seals (if any) each time the storage vessel is emptied and degassed. If the internal floating roof has defects, the primary seal has holes, tears, or other openings in the seal or the seal fabric, or the secondary seal has holes, tears, or other openings in the seal or the seal fabric, or the gaskets no longer close off the liquid surfaces from the atmosphere, or the slotted membrane has more than 10 percent open area, the owner or operator shall repair the items as necessary so that none of the conditions specified in this paragraph exist before refilling the storage vessel with VOL. In no event shall inspections conducted in accordance with this provision occur at intervals greater than 10 years in the case of vessels conducting the annual visual inspection as specified in d)(3) and d)(4)b. and at intervals no greater than 5 years in the case of vessels specified in d)(4)a.
 - (6) The owner or operator shall keep copies of all reports and records required in e)(2), e)(3), and e)(4), for at least 2 years.
 - (7) The permittee shall keep a record of each inspection performed as required by d)(2), d)(3), d)(4), and d)(5). Each record shall identify the storage vessel on which the inspection was performed and shall contain the date the vessel was inspected and the observed condition of each component of the control equipment (seals, internal floating roof, and fittings).
 - (8) The owner or operator shall keep copies of all records required by d)(2) through d)(8), for at least 2 years.
 - (9) The owner or operator shall keep readily accessible records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel (shall be kept for the life of the source).
 - (10) The permittee shall maintain monthly records of the amount of (gallons per month and total gallons, to date for the calendar year) of material throughput for this emissions unit.
- e) Reporting Requirements
- (1) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.
 - (2) The permittee shall notify the Ohio EPA, NWDO in writing at least 30 days prior to the filling or refilling of each storage vessel for which an inspection is required by d)(2) and d)(5) to afford the Ohio EPA, NWDO the opportunity to have an observer present. If the

inspection required by d)(5) is not planned and the owner or operator could not have known about the inspection 30 days in advance of refilling the tank, the owner or operator shall notify the Ohio EPA, NWDO at least 7 days prior to the refilling of the storage vessel. Notification shall be made by telephone immediately followed by written documentation demonstrating why the inspection was unplanned. Alternatively, this notification including the written documentation may be made in writing and sent by express mail so that it is received by the Ohio EPA, NWDO at least 7 days prior to the refilling.

- (3) The permittee shall furnish the Ohio EPA, NWDO with a report that describes the control equipment and certifies that the control equipment meets the specifications of b)(2)e. through b)(2)m. and d)(2). This report shall be an attachment to the notification of the actual date of initial startup of an affected facility postmarked within 15 days after such date.
- (4) If any of the conditions described in d)(3) are detected during the annual visual inspection required by d)(3), a report shall be furnished to the Ohio EPA, NWDO within 30 days of the inspection. Each report shall identify the storage vessel, the nature of the defects, and the date the storage vessel was emptied or the nature of and date the repair was made.
- (5) After each inspection required by d)(4) that finds holes or tears in the seal or seal fabric, or defects in the internal floating roof, or other control equipment defects listed in d)(4)b., a report shall be furnished to the Ohio EPA, NWDO within 30 days of the inspection. The report shall identify the storage vessel and the reason it did not meet the specifications of b)(2)e. through b)(2)m. or d)(4) and list each repair made.
- (6) If the permittee placed, stored, or held in this emissions unit any petroleum liquid with a true vapor pressure which was greater than 0.754 pounds per square inch absolute, the permittee shall notify the Ohio EPA, NWDO within 30 days of becoming aware of the occurrence.

f) Testing Requirements

- (1) Compliance with the emission limitations in section b)(1) of the terms and conditions of this permit shall be determined in accordance with the following methods:
 - a. Emission Limitation:
0.38 ton VOC/yr

Applicable Compliance Method:
The permittee shall demonstrate compliance with the annual allowable VOC emission limitation by rim seal loss, withdraw loss and deck fitting loss calculations as determined by U.S. EPA Tanks 4.0 (or the most current version) program with a maximum annual material throughput of 86,000,000 gallons.

g) Miscellaneous Requirements

- (1) None.

9. T002, denaturant tank

Operations, Property and/or Equipment Description:

250,000 gallon storage tank (denaturant)

a) This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).

(1) For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.

a. None.

(2) For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.

a. None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(F)	Volatile organic compounds (VOC) shall not exceed 1.65 ton per year See b)(2)a. and c)(1)
b.	OAC rule 3745-31-05(A)(3), as effective 11/30/01	See b)(2)b. and b)(2)c.
c.	OAC rule 3745-31-05(A)(3)(a)(ii), as effective 12/01/06	See b)(2)d.
d.	40 CFR Part 60 Subpart Kb	See b)(2)r.
e.	OAC rule 3745-21-09(L)	See b)(2)q.

(2) Additional Terms and Conditions

a. This permit establishes the following voluntary restrictions for the purpose of establishing legally and practically enforceable limitations representing the potential to emit (PTE). These emission limitations are based on the operational restriction contained in c)(1) which require control equipment:

i. 1.65 tons VOC/yr

- ii. A maximum material throughput of 3,260,000; and
 - iii. The use on an internal floating roof.
- b. BAT requirements for this emissions unit have been determined to be compliance with the voluntary restrictions established in accordance with OAC rule 3745-31-05(F) [See b)(2)a.]. The voluntary restrictions were intentionally established to be consistent with the BAT requirements under OAC rule 3745-31-05(A)(3), as effective 11/30/01 for two specific purposes as indicated below:
- i. BAT requirements under OAC rule 3745-31-05(A)(3), as effective 11/30/01 would be fulfilled by compliance with voluntary restrictions; and
 - ii. The emissions unit will avoid any BAT requirements under OAC rule 3745-31-05(A)(3), as effective 12/01/06 [See b)(2)d.].
- c. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to OAC rule 3745-31-05(A)(3), as effective, November 30, 2001, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to ORC changes effective August 3, 2006 (S.B. 265 changes), such that BAT is no longer required by State regulations for NAAQS pollutant less than ten tons per year. However, that rule revision has not yet been approved by U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006 version of 3745-31-05, then these emission limits/control measures no longer apply.
- d. This rule paragraph applies once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05 as part of the State Implementation Plan.
- This permit to install (PTI) takes into account the use of a ventless delivery system for the unloading of gasoline to this storage tank , an internal floating roof and a maximum material throughput of 3,260,000 gallons to control VOC emissions, whenever this air contaminant source is in operation, as a voluntary restriction as proposed by the permittee for the purpose of avoiding Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3).
- e. The fixed roof storage tank shall be equipped with an internal floating roof.
 - f. The automatic bleeder vents shall be closed at all times except when the roof is floated off or landed on the roof leg supports, and the rim vents, if provided, shall be set to open when the roof is being floated off the roof leg supports or is at the manufacturer's recommended setting.
 - g. All openings, except stub drains, shall be equipped with a cover, seal or lid which is to be in a closed position at all times except when in actual use for tank gauging or sampling.

- h. The internal floating roof shall rest or float on the liquid surface (but not necessarily in complete contact with it) inside a storage vessel that has a fixed roof. The internal floating roof shall be floating on the liquid surface at all times, except during initial fill and during those intervals when the storage vessel is completely emptied or subsequently emptied and refilled. When the roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as rapidly as possible.
- i. Each internal floating roof shall be equipped with one of the following closure devices between the wall of the storage vessel and the edge of the internal floating roof:
 - i. A foam- or liquid-filled seal mounted in contact with the liquid (liquid-mounted seal). A liquid-mounted seal means a foam- or liquid-filled seal mounted in contact with the liquid between the wall of the storage vessel and the floating roof continuously around the circumference of the tank.
 - ii. Two seals mounted one above the other so that each forms a continuous closure that completely covers the space between the wall of the storage vessel and the edge of the internal floating roof. The lower seal may be vapor-mounted, but both must be continuous.
 - iii. A mechanical shoe seal. A mechanical shoe seal is a metal sheet held vertically against the wall of the storage vessel by springs or weighted levers and is connected by braces to the floating roof. A flexible coated fabric (envelope) spans the annular space between the metal sheet and the floating roof.
- j. Each opening in a non-contact internal floating roof except for automatic bleeder vents (vacuum breaker vents) and the rim space vents is to provide a projection below the liquid surface.
- k. Each opening in the internal floating roof except for leg sleeves, automatic bleeder vents, rim space vents, column wells, ladder wells, sample wells, and stub drains is to be equipped with a cover or lid which is to be maintained in a closed position at all times (i.e., no visible gap) except when the device is in actual use. The cover or lid shall be equipped with a gasket. Covers on each access hatch and automatic gauge float well shall be bolted except when they are in use.
- l. Automatic bleeder vents shall be equipped with a gasket and are to be closed at all times when the roof is floating except when the roof is being floated off or is being landed on the roof leg supports.
- m. Rim space vents shall be equipped with a gasket and are to be set to open only when the internal floating roof is not floating or at the manufacturer's recommended setting.

- n. Each penetration of the internal floating roof for the purpose of sampling shall be a sample well. The sample well shall have a slit fabric cover that covers at least 90 percent of the opening.
- o. Each penetration of the internal floating roof that allows for passage of a column supporting the fixed roof shall have a flexible fabric sleeve seal or a gasketed sliding cover.
- p. Each penetration of the internal floating roof that allows for passage of a ladder shall have a gasketed sliding cover.
- q. OAC rule 3745-21-09(L) is not applicable because this tank does not store petroleum liquids as defined in OAC rule 3745-21-01 (E)(13).
- r. The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-02(A).

c) **Operational Restrictions**

- (1) The following operational restrictions have been included in this permit for the purpose of establishing legally and practically enforceable limitation requirements which limit PTE [See b)(2)a.]:
 - a. This emission unit shall be equipped with an internal floating roof with a maximum material throughput of 3,620,000 gallons.
- (2) The maximum true vapor pressure of organic liquid stored in this storage tank shall not exceed 11.11 pound per square inch absolute.

d) **Monitoring and/or Recordkeeping Requirements**

- (1) The permittee shall maintain records of the following information:
 - a. The types of petroleum liquids stored in the tank.
 - b. The maximum true vapor pressure (in pounds per square inch absolute), as stored, of each liquid that has a maximum true vapor pressure greater than 11.11 pound per square inch absolute. Available data on the storage temperature may be used to determine the maximum true vapor pressure as in the following:
 - i. For vessels operated above or below ambient temperatures, the maximum true vapor pressure is calculated based upon the highest expected calendar-month average of the storage temperature. For vessels operated at ambient temperatures, the maximum true vapor pressure is calculated based upon the maximum local monthly average ambient temperature as reported by the National Weather Service.
 - ii. For refined petroleum products the vapor pressure may be obtained by the following:
 - (a) Available data on the Reid vapor pressure and the maximum expected storage temperature based on the highest expected

calendar-month average temperature of the stored product may be used to determine the maximum true vapor pressure from nomographs contained in API Bulletin 2517 (incorporated by reference--See Sec. 60.17), unless the Ohio EPA, NWDO specifically requests that the liquid be sampled, the actual storage temperature determined, and the Reid vapor pressure determined from the sample(s).

- (b) The true vapor pressure of each type of crude oil with a Reid vapor pressure less than 13.8 kPa or with physical properties that preclude determination by the recommended method is to be determined from available data and recorded if the estimated maximum true vapor pressure is greater than 3.5 kPa.
- iii. For other liquids, the vapor pressure:
 - (a) May be obtained from standard reference texts, or
 - (b) Determined by ASTM Method D2879-83 (incorporated by reference--See Sec. 60.17); or
 - (c) Measured by an appropriate method approved by the Ohio EPA, NWDO; or
 - (d) Calculated by an appropriate method approved by the Ohio EPA, NWDO.
- (2) Visually inspect the internal floating roof, the primary seal, and the secondary seal (if one is in service), prior to filling the storage vessel with VOL. If there are holes, tears, or other openings in the primary seal, the secondary seal, or the seal fabric or defects in the internal floating roof, or both, the owner or operator shall repair the items before filling the storage vessel.
- (3) For vessels equipped with a liquid-mounted or mechanical shoe primary seal, the permittee shall visually inspect the internal floating roof and the primary seal or the secondary seal (if one is in service) through manholes and roof hatches on the fixed roof at least once every 12 months after initial fill. If the internal floating roof is not resting on the surface of the VOL inside the storage vessel, or there is liquid accumulated on the roof, or the seal is detached, or there are holes or tears in the seal fabric, the owner or operator shall repair the items or empty and remove the storage vessel from service within 45 days. If a failure that is detected during inspections required in this paragraph cannot be repaired within 45 days and if the vessel cannot be emptied within 45 days, a 30-day extension may be requested from the Ohio EPA, NWDO in the inspection report required in D.3. Such a request for an extension must document that alternate storage capacity is unavailable and specify a schedule of actions the company will take that will assure that the control equipment will be repaired or the vessel will be emptied as soon as possible.

- (4) For vessels equipped with a double-seal system as specified in b)(2)i.(ii):
 - a. The permittee shall visually inspect the vessel as specified in d)(5) at least every 5 years; or
 - b. The permittee shall visually inspect the vessel as specified in d)(3).
 - (5) The permittee shall visually inspect the internal floating roof, the primary seal, the secondary seal (if one is in service), gaskets, slotted membranes and sleeve seals (if any) each time the storage vessel is emptied and degassed. If the internal floating roof has defects, the primary seal has holes, tears, or other openings in the seal or the seal fabric, or the secondary seal has holes, tears, or other openings in the seal or the seal fabric, or the gaskets no longer close off the liquid surfaces from the atmosphere, or the slotted membrane has more than 10 percent open area, the owner or operator shall repair the items as necessary so that none of the conditions specified in this paragraph exist before refilling the storage vessel with VOL. In no event shall inspections conducted in accordance with this provision occur at intervals greater than 10 years in the case of vessels conducting the annual visual inspection as specified in d)(3) and d)(4)b. and at intervals no greater than 5 years in the case of vessels specified in d)(4)a.
 - (6) The owner or operator shall keep copies of all reports and records required in e)(2), e)(3), and e)(4), for at least 2 years.
 - (7) The permittee shall keep a record of each inspection performed as required by d)(2), d)(3), d)(4), and d)(5). Each record shall identify the storage vessel on which the inspection was performed and shall contain the date the vessel was inspected and the observed condition of each component of the control equipment (seals, internal floating roof, and fittings).
 - (8) The owner or operator shall keep copies of all records required by d)(2) through d)(8), for at least 2 years.
 - (9) The owner or operator shall keep readily accessible records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel (shall be kept for the life of the source).
 - (10) The permittee shall maintain monthly records of the amount of (gallons per month and total gallons, to date for the calendar year) of material throughput for this emissions unit.
- e) Reporting Requirements
- (1) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.
 - (2) The permittee shall notify the Ohio EPA, NWDO in writing at least 30 days prior to the filling or refilling of each storage vessel for which an inspection is required by d)(2) and d)(5) to afford the Ohio EPA, NWDO the opportunity to have an observer present. If the

inspection required by d)(5) is not planned and the owner or operator could not have known about the inspection 30 days in advance of refilling the tank, the owner or operator shall notify the Ohio EPA, NWDO at least 7 days prior to the refilling of the storage vessel. Notification shall be made by telephone immediately followed by written documentation demonstrating why the inspection was unplanned. Alternatively, this notification including the written documentation may be made in writing and sent by express mail so that it is received by the Ohio EPA, NWDO at least 7 days prior to the refilling.

- (3) The permittee shall furnish the Ohio EPA, NWDO with a report that describes the control equipment and certifies that the control equipment meets the specifications of b)(2)e. through b)(2)m. and d)(2). This report shall be an attachment to the notification of the actual date of initial startup of an affected facility postmarked within 15 days after such date.
- (4) If any of the conditions described in d)(3) are detected during the annual visual inspection required by d)(3), a report shall be furnished to the Ohio EPA, NWDO within 30 days of the inspection. Each report shall identify the storage vessel, the nature of the defects, and the date the storage vessel was emptied or the nature of and date the repair was made.
- (5) After each inspection required by d)(4) that finds holes or tears in the seal or seal fabric, or defects in the internal floating roof, or other control equipment defects listed in d)(4)b., a report shall be furnished to the Ohio EPA, NWDO within 30 days of the inspection. The report shall identify the storage vessel and the reason it did not meet the specifications of b)(2)e. through b)(2)m. or d)(4) and list each repair made.
- (6) If the permittee placed, stored, or held in this emissions unit any petroleum liquid with a true vapor pressure which was greater than 11.11 pounds per square inch absolute, the permittee shall notify the Ohio EPA, NWDO within 30 days of becoming aware of the occurrence.

f) Testing Requirements

- (1) Compliance with the emission limitations in section b)(1) of the terms and conditions of this permit shall be determined in accordance with the following methods:
 - a. Emission Limitation:
1.65 ton VOC/yr

Applicable Compliance Method:
The permittee shall demonstrate compliance with the annual allowable VOC emission limitation by rim seal loss, withdraw loss and deck fitting loss calculations as determined by U.S. EPA Tanks 4.0 (or the most current version) program with a maximum annual material throughput of 3,260,000 gallons.

g) Miscellaneous Requirements

- (1) None.

10. T003, 200 ethanol tank

Operations, Property and/or Equipment Description:

2 million gallon storage tank (200 proof ethanol)

a) This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).

(1) For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.

a. None.

(2) For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.

a. None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(F)	Volatile organic compounds (VOC) shall not exceed 0.18 ton per year See b)(2)a. and c)(1)
b.	OAC rule 3745-31-05(A)(3), as effective 11/30/01	See b)(2)b. and b)(2)c.
c.	OAC rule 3745-31-05(A)(3)(a)(ii), as effective 12/01/06	See b)(2)d.
d.	40 CFR Part 60 Subpart Kb	See b)(2)r.
e.	OAC rule 3745-21-09(L)	See b)(2)q.

(2) Additional Terms and Conditions

a. This permit establishes the following voluntary restrictions for the purpose of establishing legally and practically enforceable limitations representing the potential to emit (PTE). These emission limitations are based on the operational restriction contained in c)(1) which require control equipment:

- i. 0.18 tons VOC/yr;
 - ii. A maximum material throughput of 32,780,000 gallons; and
 - iii. The use of an internal floating roof.
- b. BAT requirements for this emissions unit have been determined to be compliance with the voluntary restrictions established in accordance with OAC rule 3745-31-05(F) [See b)(2)a.]. The voluntary restrictions were intentionally established to be consistent with the BAT requirements under OAC rule 3745-31-05(A)(3), as effective 11/30/01 for two specific purposes as indicated below:
- i. BAT requirements under OAC rule 3745-31-05(A)(3), as effective 11/30/01 would be fulfilled by compliance with voluntary restrictions; and
 - ii. The emissions unit will avoid any BAT requirements under OAC rule 3745-31-05(A)(3), as effective 12/01/06 [See b)(2)d.].
- c. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to OAC rule 3745-31-05(A)(3), as effective, November 30, 2001, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to ORC changes effective August 3, 2006 (S.B. 265 changes), such that BAT is no longer required by State regulations for NAAQS pollutant less than ten tons per year. However, that rule revision has not yet been approved by U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006 version of 3745-31-05, then these emission limits/control measures no longer apply.
- d. This rule paragraph applies once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05 as part of the State Implementation Plan.
- This permit to install (PTI) takes into account the use of an internal floating roof and a maximum material throughput of 32,780,000 gallons to control VOC emissions, whenever this air contaminant source is in operation, as a voluntary restriction as proposed by the permittee for the purpose of avoiding Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3).
- e. The fixed roof storage tank shall be equipped with an internal floating roof.
 - f. The automatic bleeder vents shall be closed at all times except when the roof is floated off or landed on the roof leg supports, and the rim vents, if provided, shall be set to open when the roof is being floated off the roof leg supports or is at the manufacturer's recommended setting.
 - g. All openings, except stub drains, shall be equipped with a cover, seal or lid which is to be in a closed position at all times except when in actual use for tank gauging or sampling.

- h. The internal floating roof shall rest or float on the liquid surface (but not necessarily in complete contact with it) inside a storage vessel that has a fixed roof. The internal floating roof shall be floating on the liquid surface at all times, except during initial fill and during those intervals when the storage vessel is completely emptied or subsequently emptied and refilled. When the roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as rapidly as possible.
- i. Each internal floating roof shall be equipped with one of the following closure devices between the wall of the storage vessel and the edge of the internal floating roof:
 - i. A foam- or liquid-filled seal mounted in contact with the liquid (liquid-mounted seal). A liquid-mounted seal means a foam- or liquid-filled seal mounted in contact with the liquid between the wall of the storage vessel and the floating roof continuously around the circumference of the tank.
 - ii. Two seals mounted one above the other so that each forms a continuous closure that completely covers the space between the wall of the storage vessel and the edge of the internal floating roof. The lower seal may be vapor-mounted, but both must be continuous.
 - iii. A mechanical shoe seal. A mechanical shoe seal is a metal sheet held vertically against the wall of the storage vessel by springs or weighted levers and is connected by braces to the floating roof. A flexible coated fabric (envelope) spans the annular space between the metal sheet and the floating roof.
- j. Each opening in a non-contact internal floating roof except for automatic bleeder vents (vacuum breaker vents) and the rim space vents is to provide a projection below the liquid surface.
- k. Each opening in the internal floating roof except for leg sleeves, automatic bleeder vents, rim space vents, column wells, ladder wells, sample wells, and stub drains is to be equipped with a cover or lid which is to be maintained in a closed position at all times (i.e., no visible gap) except when the device is in actual use. The cover or lid shall be equipped with a gasket. Covers on each access hatch and automatic gauge float well shall be bolted except when they are in use.
- l. Automatic bleeder vents shall be equipped with a gasket and are to be closed at all times when the roof is floating except when the roof is being floated off or is being landed on the roof leg supports.
- m. Rim space vents shall be equipped with a gasket and are to be set to open only when the internal floating roof is not floating or at the manufacturer's recommended setting.

- n. Each penetration of the internal floating roof for the purpose of sampling shall be a sample well. The sample well shall have a slit fabric cover that covers at least 90 percent of the opening.
- o. Each penetration of the internal floating roof that allows for passage of a column supporting the fixed roof shall have a flexible fabric sleeve seal or a gasketed sliding cover.
- p. Each penetration of the internal floating roof that allows for passage of a ladder shall have a gasketed sliding cover.
- q. OAC rule 3745-21-09(L) is not applicable because this tank does not store petroleum liquids as defined in OAC rule 3745-21-01 (E)(13).
- r. The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-02(A).

c) **Operational Restrictions**

- (1) The following operational restrictions have been included in this permit for the purpose of establishing legally and practically enforceable limitation requirements which limit PTE [See b)(2)a.]:
 - a. This emission unit shall be equipped with an internal floating roof with a maximum material throughput of 32,780,000 gallons.
- (2) The maximum true vapor pressure of organic liquid stored in this storage tank shall not exceed 0.754 pound per square inch absolute.

d) **Monitoring and/or Recordkeeping Requirements**

- (1) The permittee shall maintain records of the following information:
 - a. The types of petroleum liquids stored in the tank.
 - b. The maximum true vapor pressure (in pounds per square inch absolute), as stored, of each liquid that has a maximum true vapor pressure greater than 0.754 pound per square inch absolute. Available data on the storage temperature may be used to determine the maximum true vapor pressure as in the following:
 - i. For vessels operated above or below ambient temperatures, the maximum true vapor pressure is calculated based upon the highest expected calendar-month average of the storage temperature. For vessels operated at ambient temperatures, the maximum true vapor pressure is calculated based upon the maximum local monthly average ambient temperature as reported by the National Weather Service.
 - ii. For refined petroleum products the vapor pressure may be obtained by the following:
 - (a) Available data on the Reid vapor pressure and the maximum expected storage temperature based on the highest expected

calendar-month average temperature of the stored product may be used to determine the maximum true vapor pressure from nomographs contained in API Bulletin 2517 (incorporated by reference--See Sec. 60.17), unless the Ohio EPA, NWDO specifically requests that the liquid be sampled, the actual storage temperature determined, and the Reid vapor pressure determined from the sample(s).

- (b) The true vapor pressure of each type of crude oil with a Reid vapor pressure less than 13.8 kPa or with physical properties that preclude determination by the recommended method is to be determined from available data and recorded if the estimated maximum true vapor pressure is greater than 3.5 kPa.
- iii. For other liquids, the vapor pressure:
 - (a) May be obtained from standard reference texts, or
 - (b) Determined by ASTM Method D2879-83 (incorporated by reference--See Sec. 60.17); or
 - (c) Measured by an appropriate method approved by the Ohio EPA, NWDO; or
 - (d) Calculated by an appropriate method approved by the Ohio EPA, NWDO.
- (2) Visually inspect the internal floating roof, the primary seal, and the secondary seal (if one is in service), prior to filling the storage vessel with VOL. If there are holes, tears, or other openings in the primary seal, the secondary seal, or the seal fabric or defects in the internal floating roof, or both, the owner or operator shall repair the items before filling the storage vessel.
- (3) For vessels equipped with a liquid-mounted or mechanical shoe primary seal, the permittee shall visually inspect the internal floating roof and the primary seal or the secondary seal (if one is in service) through manholes and roof hatches on the fixed roof at least once every 12 months after initial fill. If the internal floating roof is not resting on the surface of the VOL inside the storage vessel, or there is liquid accumulated on the roof, or the seal is detached, or there are holes or tears in the seal fabric, the owner or operator shall repair the items or empty and remove the storage vessel from service within 45 days. If a failure that is detected during inspections required in this paragraph cannot be repaired within 45 days and if the vessel cannot be emptied within 45 days, a 30-day extension may be requested from the Ohio EPA, NWDO in the inspection report required in D.3. Such a request for an extension must document that alternate storage capacity is unavailable and specify a schedule of actions the company will take that will assure that the control equipment will be repaired or the vessel will be emptied as soon as possible.

- (4) For vessels equipped with a double-seal system as specified in b)(2)i.(ii):
 - a. The permittee shall visually inspect the vessel as specified in d)(5) at least every 5 years; or
 - b. The permittee shall visually inspect the vessel as specified in d)(3).
 - (5) The permittee shall visually inspect the internal floating roof, the primary seal, the secondary seal (if one is in service), gaskets, slotted membranes and sleeve seals (if any) each time the storage vessel is emptied and degassed. If the internal floating roof has defects, the primary seal has holes, tears, or other openings in the seal or the seal fabric, or the secondary seal has holes, tears, or other openings in the seal or the seal fabric, or the gaskets no longer close off the liquid surfaces from the atmosphere, or the slotted membrane has more than 10 percent open area, the owner or operator shall repair the items as necessary so that none of the conditions specified in this paragraph exist before refilling the storage vessel with VOL. In no event shall inspections conducted in accordance with this provision occur at intervals greater than 10 years in the case of vessels conducting the annual visual inspection as specified in d)(3) and d)(4)b. and at intervals no greater than 5 years in the case of vessels specified in d)(4)a.
 - (6) The owner or operator shall keep copies of all reports and records required in e)(2), e)(3), and e)(4), for at least 2 years.
 - (7) The permittee shall keep a record of each inspection performed as required by d)(2), d)(3), d)(4), and d)(5). Each record shall identify the storage vessel on which the inspection was performed and shall contain the date the vessel was inspected and the observed condition of each component of the control equipment (seals, internal floating roof, and fittings).
 - (8) The owner or operator shall keep copies of all records required by d)(2) through d)(8), for at least 2 years.
 - (9) The owner or operator shall keep readily accessible records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel (shall be kept for the life of the source).
 - (10) The permittee shall maintain monthly records of the amount of (gallons per month and total gallons, to date for the calendar year) of material throughput for this emissions unit.
- e) Reporting Requirements
- (1) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.
 - (2) The permittee shall notify the Ohio EPA, NWDO in writing at least 30 days prior to the filling or refilling of each storage vessel for which an inspection is required by d)(2) and d)(5) to afford the Ohio EPA, NWDO the opportunity to have an observer present. If the

inspection required by d)(5) is not planned and the owner or operator could not have known about the inspection 30 days in advance of refilling the tank, the owner or operator shall notify the Ohio EPA, NWDO at least 7 days prior to the refilling of the storage vessel. Notification shall be made by telephone immediately followed by written documentation demonstrating why the inspection was unplanned. Alternatively, this notification including the written documentation may be made in writing and sent by express mail so that it is received by the Ohio EPA, NWDO at least 7 days prior to the refilling.

- (3) The permittee shall furnish the Ohio EPA, NWDO with a report that describes the control equipment and certifies that the control equipment meets the specifications of b)(2)e. through b)(2)m. and d)(2). This report shall be an attachment to the notification of the actual date of initial startup of an affected facility postmarked within 15 days after such date.
- (4) If any of the conditions described in d)(3) are detected during the annual visual inspection required by d)(3), a report shall be furnished to the Ohio EPA, NWDO within 30 days of the inspection. Each report shall identify the storage vessel, the nature of the defects, and the date the storage vessel was emptied or the nature of and date the repair was made.
- (5) After each inspection required by d)(4) that finds holes or tears in the seal or seal fabric, or defects in the internal floating roof, or other control equipment defects listed in d)(4)b., a report shall be furnished to the Ohio EPA, NWDO within 30 days of the inspection. The report shall identify the storage vessel and the reason it did not meet the specifications of b)(2)e. through b)(2)m. or d)(4) and list each repair made.
- (6) If the permittee placed, stored, or held in this emissions unit any petroleum liquid with a true vapor pressure which was greater than 0.754 pounds per square inch absolute, the permittee shall notify the Ohio EPA, NWDO within 30 days of becoming aware of the occurrence.

f) Testing Requirements

- (1) Compliance with the emission limitations in section b)(1) of the terms and conditions of this permit shall be determined in accordance with the following methods:
 - a. Emission Limitation:
0.18 ton VOC/yr

Applicable Compliance Method:
The permittee shall demonstrate compliance with the annual allowable VOC emission limitation by rim seal loss, withdraw loss and deck fitting loss calculations as determined by U.S. EPA Tanks 4.0 (or the most current version) program with a maximum annual material throughput of 32,780,000 gallons.

g) Miscellaneous Requirements

- (1) None.

11. T004, 200 ethanol tank

Operations, Property and/or Equipment Description:

2 million gallon storage tank (200 proof ethanol)

a) This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).

(1) For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.

a. None.

(2) For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.

a. None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(F)	Volatile organic compounds (VOC) shall not exceed 0.18 ton per year See b)(2)a. and c)(1)
b.	OAC rule 3745-31-05(A)(3), as effective 11/30/01	See b)(2)b. and b)(2)c.
c.	OAC rule 3745-31-05(A)(3)(a)(ii), as effective 12/01/06	See b)(2)d.
d.	40 CFR Part 60 Subpart Kb	See b)(2)r.
e.	OAC rule 3745-21-09(L)	See b)(2)q.

(2) Additional Terms and Conditions

a. This permit establishes the following voluntary restrictions for the purpose of establishing legally and practically enforceable limitations representing the potential to emit (PTE). These emission limitations are based on the operational restriction contained in c)(1) which require control equipment:

i. 0.18 tons VOC/yr;

- ii. A maximum material throughput of 32,780,000 gallons; and
 - iii. The use on an internal floating roof.
- b. BAT requirements for this emissions unit have been determined to be compliance with the voluntary restrictions established in accordance with OAC rule 3745-31-05(F) [See b)(2)a.]. The voluntary restrictions were intentionally established to be consistent with the BAT requirements under OAC rule 3745-31-05(A)(3), as effective 11/30/01 for two specific purposes as indicated below:
- i. BAT requirements under OAC rule 3745-31-05(A)(3), as effective 11/30/01 would be fulfilled by compliance with voluntary restrictions; and
 - ii. The emissions unit will avoid any BAT requirements under OAC rule 3745-31-05(A)(3), as effective 12/01/06 [See b)(2)d.].
- c. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to OAC rule 3745-31-05(A)(3), as effective, November 30, 2001, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to ORC changes effective August 3, 2006 (S.B. 265 changes), such that BAT is no longer required by State regulations for NAAQS pollutant less than ten tons per year. However, that rule revision has not yet been approved by U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006 version of 3745-31-05, then these emission limits/control measures no longer apply.
- d. This rule paragraph applies once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05 as part of the State Implementation Plan.
- This permit to install (PTI) takes into account the use of an internal floating roof and a maximum material throughput of 32,780,000 gallons to control VOC emissions, whenever this air contaminant source is in operation, as a voluntary restriction as proposed by the permittee for the purpose of avoiding Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3).
- e. The fixed roof storage tank shall be equipped with an internal floating roof.
 - f. The automatic bleeder vents shall be closed at all times except when the roof is floated off or landed on the roof leg supports, and the rim vents, if provided, shall be set to open when the roof is being floated off the roof leg supports or is at the manufacturer's recommended setting.
 - g. All openings, except stub drains, shall be equipped with a cover, seal or lid which is to be in a closed position at all times except when in actual use for tank gauging or sampling.
 - h. The internal floating roof shall rest or float on the liquid surface (but not necessarily in complete contact with it) inside a storage vessel that has a fixed

roof. The internal floating roof shall be floating on the liquid surface at all times, except during initial fill and during those intervals when the storage vessel is completely emptied or subsequently emptied and refilled. When the roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as rapidly as possible.

- i. Each internal floating roof shall be equipped with one of the following closure devices between the wall of the storage vessel and the edge of the internal floating roof:
 - i. A foam- or liquid-filled seal mounted in contact with the liquid (liquid-mounted seal). A liquid-mounted seal means a foam- or liquid-filled seal mounted in contact with the liquid between the wall of the storage vessel and the floating roof continuously around the circumference of the tank.
 - ii. Two seals mounted one above the other so that each forms a continuous closure that completely covers the space between the wall of the storage vessel and the edge of the internal floating roof. The lower seal may be vapor-mounted, but both must be continuous.
 - iii. A mechanical shoe seal. A mechanical shoe seal is a metal sheet held vertically against the wall of the storage vessel by springs or weighted levers and is connected by braces to the floating roof. A flexible coated fabric (envelope) spans the annular space between the metal sheet and the floating roof.
- j. Each opening in a non-contact internal floating roof except for automatic bleeder vents (vacuum breaker vents) and the rim space vents is to provide a projection below the liquid surface.
- k. Each opening in the internal floating roof except for leg sleeves, automatic bleeder vents, rim space vents, column wells, ladder wells, sample wells, and stub drains is to be equipped with a cover or lid which is to be maintained in a closed position at all times (i.e., no visible gap) except when the device is in actual use. The cover or lid shall be equipped with a gasket. Covers on each access hatch and automatic gauge float well shall be bolted except when they are in use.
- l. Automatic bleeder vents shall be equipped with a gasket and are to be closed at all times when the roof is floating except when the roof is being floated off or is being landed on the roof leg supports.
- m. Rim space vents shall be equipped with a gasket and are to be set to open only when the internal floating roof is not floating or at the manufacturer's recommended setting.
- n. Each penetration of the internal floating roof for the purpose of sampling shall be a sample well. The sample well shall have a slit fabric cover that covers at least 90 percent of the opening.

- o. Each penetration of the internal floating roof that allows for passage of a column supporting the fixed roof shall have a flexible fabric sleeve seal or a gasketed sliding cover.
- p. Each penetration of the internal floating roof that allows for passage of a ladder shall have a gasketed sliding cover.
- q. OAC rule 3745-21-09(L) is not applicable because this tank does not store petroleum liquids as defined in OAC rule 3745-21-01 (E)(13).
- r. The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-02(A).

c) **Operational Restrictions**

- (1) The following operational restrictions have been included in this permit for the purpose of establishing legally and practically enforceable limitation requirements which limit PTE [See b)(2)a.]:
 - a. This emission unit shall be equipped with an internal floating roof with a maximum material throughput of 32,780,000 gallons.
- (2) The maximum true vapor pressure of organic liquid stored in this storage tank shall not exceed 0.754 pound per square inch absolute.

d) **Monitoring and/or Recordkeeping Requirements**

- (1) The permittee shall maintain records of the following information:
 - a. The types of petroleum liquids stored in the tank.
 - b. The maximum true vapor pressure (in pounds per square inch absolute), as stored, of each liquid that has a maximum true vapor pressure greater than 0.754 pound per square inch absolute. Available data on the storage temperature may be used to determine the maximum true vapor pressure as in the following:
 - i. For vessels operated above or below ambient temperatures, the maximum true vapor pressure is calculated based upon the highest expected calendar-month average of the storage temperature. For vessels operated at ambient temperatures, the maximum true vapor pressure is calculated based upon the maximum local monthly average ambient temperature as reported by the National Weather Service.
 - ii. For refined petroleum products the vapor pressure may be obtained by the following:
 - (a) Available data on the Reid vapor pressure and the maximum expected storage temperature based on the highest expected calendar-month average temperature of the stored product may be used to determine the maximum true vapor pressure from nomographs contained in API Bulletin 2517 (incorporated by reference--See Sec. 60.17), unless the Ohio EPA, NWDO

specifically requests that the liquid be sampled, the actual storage temperature determined, and the Reid vapor pressure determined from the sample(s).

- (b) The true vapor pressure of each type of crude oil with a Reid vapor pressure less than 13.8 kPa or with physical properties that preclude determination by the recommended method is to be determined from available data and recorded if the estimated maximum true vapor pressure is greater than 3.5 kPa.
 - iii. For other liquids, the vapor pressure:
 - (a) May be obtained from standard reference texts, or
 - (b) Determined by ASTM Method D2879-83 (incorporated by reference--See Sec. 60.17); or
 - (c) Measured by an appropriate method approved by the Ohio EPA, NWDO; or
 - (d) Calculated by an appropriate method approved by the Ohio EPA, NWDO.
 - (2) Visually inspect the internal floating roof, the primary seal, and the secondary seal (if one is in service), prior to filling the storage vessel with VOL. If there are holes, tears, or other openings in the primary seal, the secondary seal, or the seal fabric or defects in the internal floating roof, or both, the owner or operator shall repair the items before filling the storage vessel.
 - (3) For vessels equipped with a liquid-mounted or mechanical shoe primary seal, the permittee shall visually inspect the internal floating roof and the primary seal or the secondary seal (if one is in service) through manholes and roof hatches on the fixed roof at least once every 12 months after initial fill. If the internal floating roof is not resting on the surface of the VOL inside the storage vessel, or there is liquid accumulated on the roof, or the seal is detached, or there are holes or tears in the seal fabric, the owner or operator shall repair the items or empty and remove the storage vessel from service within 45 days. If a failure that is detected during inspections required in this paragraph cannot be repaired within 45 days and if the vessel cannot be emptied within 45 days, a 30-day extension may be requested from the Ohio EPA, NWDO in the inspection report required in D.3. Such a request for an extension must document that alternate storage capacity is unavailable and specify a schedule of actions the company will take that will assure that the control equipment will be repaired or the vessel will be emptied as soon as possible.
 - (4) For vessels equipped with a double-seal system as specified in b)(2)i.(ii):
 - a. The permittee shall visually inspect the vessel as specified in d)(5) at least every 5 years; or
 - b. The permittee shall visually inspect the vessel as specified in d)(3).

- (5) The permittee shall visually inspect the internal floating roof, the primary seal, the secondary seal (if one is in service), gaskets, slotted membranes and sleeve seals (if any) each time the storage vessel is emptied and degassed. If the internal floating roof has defects, the primary seal has holes, tears, or other openings in the seal or the seal fabric, or the secondary seal has holes, tears, or other openings in the seal or the seal fabric, or the gaskets no longer close off the liquid surfaces from the atmosphere, or the slotted membrane has more than 10 percent open area, the owner or operator shall repair the items as necessary so that none of the conditions specified in this paragraph exist before refilling the storage vessel with VOL. In no event shall inspections conducted in accordance with this provision occur at intervals greater than 10 years in the case of vessels conducting the annual visual inspection as specified in d)(3) and d)(4)b. and at intervals no greater than 5 years in the case of vessels specified in d)(4)a.
- (6) The owner or operator shall keep copies of all reports and records required in e)(2), e)(3), and e)(4), for at least 2 years.
- (7) The permittee shall keep a record of each inspection performed as required by d)(2), d)(3), d)(4), and d)(5). Each record shall identify the storage vessel on which the inspection was performed and shall contain the date the vessel was inspected and the observed condition of each component of the control equipment (seals, internal floating roof, and fittings).
- (8) The owner or operator shall keep copies of all records required by d)(2) through d)(8), for at least 2 years.
- (9) The owner or operator shall keep readily accessible records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel (shall be kept for the life of the source).
- (10) The permittee shall maintain monthly records of the amount of (gallons per month and total gallons, to date for the calendar year) of material throughput for this emissions unit.

e) Reporting Requirements

- (1) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.
- (2) The permittee shall notify the Ohio EPA, NWDO in writing at least 30 days prior to the filling or refilling of each storage vessel for which an inspection is required by d)(2) and d)(5) to afford the Ohio EPA, NWDO the opportunity to have an observer present. If the inspection required by d)(5) is not planned and the owner or operator could not have known about the inspection 30 days in advance of refilling the tank, the owner or operator shall notify the Ohio EPA, NWDO at least 7 days prior to the refilling of the storage vessel. Notification shall be made by telephone immediately followed by written documentation demonstrating why the inspection was unplanned. Alternatively, this notification including the written documentation may be made in writing and sent by

express mail so that it is received by the Ohio EPA, NWDO at least 7 days prior to the refilling.

- (3) The permittee shall furnish the Ohio EPA, NWDO with a report that describes the control equipment and certifies that the control equipment meets the specifications of b)(2)e. through b)(2)m. and d)(2). This report shall be an attachment to the notification of the actual date of initial startup of an affected facility postmarked within 15 days after such date.
- (4) If any of the conditions described in d)(3) are detected during the annual visual inspection required by d)(3), a report shall be furnished to the Ohio EPA, NWDO within 30 days of the inspection. Each report shall identify the storage vessel, the nature of the defects, and the date the storage vessel was emptied or the nature of and date the repair was made.
- (5) After each inspection required by d)(4) that finds holes or tears in the seal or seal fabric, or defects in the internal floating roof, or other control equipment defects listed in d)(4)b., a report shall be furnished to the Ohio EPA, NWDO within 30 days of the inspection. The report shall identify the storage vessel and the reason it did not meet the specifications of b)(2)e. through b)(2)m. or d)(4) and list each repair made.
- (6) If the permittee placed, stored, or held in this emissions unit any petroleum liquid with a true vapor pressure which was greater than 0.754 pounds per square inch absolute, the permittee shall notify the Ohio EPA, NWDO within 30 days of becoming aware of the occurrence.

f) Testing Requirements

- (1) Compliance with the emission limitations in section b)(1) of the terms and conditions of this permit shall be determined in accordance with the following methods:

a. Emission Limitation:
0.18 ton VOC/yr

Applicable Compliance Method:

The permittee shall demonstrate compliance with the annual allowable VOC emission limitation by rim seal loss, withdraw loss and deck fitting loss calculations as determined by U.S. EPA Tanks 4.0 (or the most current version) program with a maximum annual material throughput of 32,780,000 gallons.

g) Miscellaneous Requirements

- (1) None.

12. T005, denaturant tank

Operations, Property and/or Equipment Description:

126,900 gallon storage tank (denaturant)

a) This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).

(1) For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.

a. None.

(2) For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.

a. None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(F)	Volatile organic compounds (VOC) shall not exceed 0.99 ton per year See b)(2)a. and c)(1)
b.	OAC rule 3745-31-05(A)(3), as effective 11/30/01	See b)(2)b. and b)(2)c.
c.	OAC rule 3745-31-05(A)(3)(a)(ii), as effective 12/01/06	See b)(2)d.
d.	40 CFR Part 60 Subpart Kb	See b)(2)r.
e.	OAC rule 3745-21-09(L)	See b)(2)q.

(2) Additional Terms and Conditions

a. This permit establishes the following voluntary restrictions for the purpose of establishing legally and practically enforceable limitations representing the potential to emit (PTE). These emission limitations are based on the operational restriction contained in c)(1) which require control equipment:

i. 0.99 ton VOC/yr;

- ii. A maximum material throughput of 1,654,776 gallons; and
 - iii. The use on an internal floating roof.
- b. BAT requirements for this emissions unit have been determined to be compliance with the voluntary restrictions established in accordance with OAC rule 3745-31-05(F) [See b)(2)a.]. The voluntary restrictions were intentionally established to be consistent with the BAT requirements under OAC rule 3745-31-05(A)(3), as effective 11/30/01 for two specific purposes as indicated below:
- i. BAT requirements under OAC rule 3745-31-05(A)(3), as effective 11/30/01 would be fulfilled by compliance with voluntary restrictions; and
 - ii. The emissions unit will avoid any BAT requirements under OAC rule 3745-31-05(A)(3), as effective 12/01/06 [See b)(2)d.].
- c. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to OAC rule 3745-31-05(A)(3), as effective, November 30, 2001, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to ORC changes effective August 3, 2006 (S.B. 265 changes), such that BAT is no longer required by State regulations for NAAQS pollutant less than ten tons per year. However, that rule revision has not yet been approved by U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006 version of 3745-31-05, then these emission limits/control measures no longer apply.
- d. This rule paragraph applies once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05 as part of the State Implementation Plan.
- This permit to install (PTI) takes into account the use of a ventless delivery system for the unloading of gasoline to this storage tank , an internal floating roof and a maximum material throughput of 1,654,776 gallons to control VOC emissions, whenever this air contaminant source is in operation, as a voluntary restriction as proposed by the permittee for the purpose of avoiding Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3).
- e. The fixed roof storage tank shall be equipped with an internal floating roof.
 - f. The automatic bleeder vents shall be closed at all times except when the roof is floated off or landed on the roof leg supports, and the rim vents, if provided, shall be set to open when the roof is being floated off the roof leg supports or is at the manufacturer's recommended setting.
 - g. All openings, except stub drains, shall be equipped with a cover, seal or lid which is to be in a closed position at all times except when in actual use for tank gauging or sampling.

- h. The internal floating roof shall rest or float on the liquid surface (but not necessarily in complete contact with it) inside a storage vessel that has a fixed roof. The internal floating roof shall be floating on the liquid surface at all times, except during initial fill and during those intervals when the storage vessel is completely emptied or subsequently emptied and refilled. When the roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as rapidly as possible.
- i. Each internal floating roof shall be equipped with one of the following closure devices between the wall of the storage vessel and the edge of the internal floating roof:
 - i. A foam- or liquid-filled seal mounted in contact with the liquid (liquid-mounted seal). A liquid-mounted seal means a foam- or liquid-filled seal mounted in contact with the liquid between the wall of the storage vessel and the floating roof continuously around the circumference of the tank.
 - ii. Two seals mounted one above the other so that each forms a continuous closure that completely covers the space between the wall of the storage vessel and the edge of the internal floating roof. The lower seal may be vapor-mounted, but both must be continuous.
 - iii. A mechanical shoe seal. A mechanical shoe seal is a metal sheet held vertically against the wall of the storage vessel by springs or weighted levers and is connected by braces to the floating roof. A flexible coated fabric (envelope) spans the annular space between the metal sheet and the floating roof.
- j. Each opening in a non-contact internal floating roof except for automatic bleeder vents (vacuum breaker vents) and the rim space vents is to provide a projection below the liquid surface.
- k. Each opening in the internal floating roof except for leg sleeves, automatic bleeder vents, rim space vents, column wells, ladder wells, sample wells, and stub drains is to be equipped with a cover or lid which is to be maintained in a closed position at all times (i.e., no visible gap) except when the device is in actual use. The cover or lid shall be equipped with a gasket. Covers on each access hatch and automatic gauge float well shall be bolted except when they are in use.
- l. Automatic bleeder vents shall be equipped with a gasket and are to be closed at all times when the roof is floating except when the roof is being floated off or is being landed on the roof leg supports.
- m. Rim space vents shall be equipped with a gasket and are to be set to open only when the internal floating roof is not floating or at the manufacturer's recommended setting.

- n. Each penetration of the internal floating roof for the purpose of sampling shall be a sample well. The sample well shall have a slit fabric cover that covers at least 90 percent of the opening.
- o. Each penetration of the internal floating roof that allows for passage of a column supporting the fixed roof shall have a flexible fabric sleeve seal or a gasketed sliding cover.
- p. Each penetration of the internal floating roof that allows for passage of a ladder shall have a gasketed sliding cover.
- q. OAC rule 3745-21-09(L) is not applicable because this tank does not store petroleum liquids as defined in OAC rule 3745-21-01 (E)(13).
- r. The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-02(A).

c) Operational Restrictions

- (1) The following operational restrictions have been included in this permit for the purpose of establishing legally and practically enforceable limitation requirements which limit PTE [See b)(2)a.]:
 - a. This emission unit shall be equipped with an internal floating roof with a maximum material throughput of 1,654,776 gallons.
- (2) The maximum true vapor pressure of organic liquid stored in this storage tank shall not exceed 11.11 pound per square inch absolute.

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall maintain records of the following information:
 - a. The types of petroleum liquids stored in the tank.
 - b. The maximum true vapor pressure (in pounds per square inch absolute), as stored, of each liquid that has a maximum true vapor pressure greater than 11.11 pound per square inch absolute. Available data on the storage temperature may be used to determine the maximum true vapor pressure as in the following:
 - i. For vessels operated above or below ambient temperatures, the maximum true vapor pressure is calculated based upon the highest expected calendar-month average of the storage temperature. For vessels operated at ambient temperatures, the maximum true vapor pressure is calculated based upon the maximum local monthly average ambient temperature as reported by the National Weather Service.
 - ii. For refined petroleum products the vapor pressure may be obtained by the following:
 - (a) Available data on the Reid vapor pressure and the maximum expected storage temperature based on the highest expected

calendar-month average temperature of the stored product may be used to determine the maximum true vapor pressure from nomographs contained in API Bulletin 2517 (incorporated by reference--See Sec. 60.17), unless the Ohio EPA, NWDO specifically requests that the liquid be sampled, the actual storage temperature determined, and the Reid vapor pressure determined from the sample(s).

- (b) The true vapor pressure of each type of crude oil with a Reid vapor pressure less than 13.8 kPa or with physical properties that preclude determination by the recommended method is to be determined from available data and recorded if the estimated maximum true vapor pressure is greater than 3.5 kPa.
- iii. For other liquids, the vapor pressure:
 - (a) May be obtained from standard reference texts, or
 - (b) Determined by ASTM Method D2879-83 (incorporated by reference--See Sec. 60.17); or
 - (c) Measured by an appropriate method approved by the Ohio EPA, NWDO; or
 - (d) Calculated by an appropriate method approved by the Ohio EPA, NWDO.
- (2) Visually inspect the internal floating roof, the primary seal, and the secondary seal (if one is in service), prior to filling the storage vessel with VOL. If there are holes, tears, or other openings in the primary seal, the secondary seal, or the seal fabric or defects in the internal floating roof, or both, the owner or operator shall repair the items before filling the storage vessel.
- (3) For vessels equipped with a liquid-mounted or mechanical shoe primary seal, the permittee shall visually inspect the internal floating roof and the primary seal or the secondary seal (if one is in service) through manholes and roof hatches on the fixed roof at least once every 12 months after initial fill. If the internal floating roof is not resting on the surface of the VOL inside the storage vessel, or there is liquid accumulated on the roof, or the seal is detached, or there are holes or tears in the seal fabric, the owner or operator shall repair the items or empty and remove the storage vessel from service within 45 days. If a failure that is detected during inspections required in this paragraph cannot be repaired within 45 days and if the vessel cannot be emptied within 45 days, a 30-day extension may be requested from the Ohio EPA, NWDO in the inspection report required in D.3. Such a request for an extension must document that alternate storage capacity is unavailable and specify a schedule of actions the company will take that will assure that the control equipment will be repaired or the vessel will be emptied as soon as possible.

- (4) For vessels equipped with a double-seal system as specified in b)(2)i.(ii):
 - a. The permittee shall visually inspect the vessel as specified in d)(5) at least every 5 years; or
 - b. The permittee shall visually inspect the vessel as specified in d)(3).
 - (5) The permittee shall visually inspect the internal floating roof, the primary seal, the secondary seal (if one is in service), gaskets, slotted membranes and sleeve seals (if any) each time the storage vessel is emptied and degassed. If the internal floating roof has defects, the primary seal has holes, tears, or other openings in the seal or the seal fabric, or the secondary seal has holes, tears, or other openings in the seal or the seal fabric, or the gaskets no longer close off the liquid surfaces from the atmosphere, or the slotted membrane has more than 10 percent open area, the owner or operator shall repair the items as necessary so that none of the conditions specified in this paragraph exist before refilling the storage vessel with VOL. In no event shall inspections conducted in accordance with this provision occur at intervals greater than 10 years in the case of vessels conducting the annual visual inspection as specified in d)(3) and d)(4)b. and at intervals no greater than 5 years in the case of vessels specified in d)(4)a.
 - (6) The owner or operator shall keep copies of all reports and records required in e)(2), e)(3), and e)(4), for at least 2 years.
 - (7) The permittee shall keep a record of each inspection performed as required by d)(2), d)(3), d)(4), and d)(5). Each record shall identify the storage vessel on which the inspection was performed and shall contain the date the vessel was inspected and the observed condition of each component of the control equipment (seals, internal floating roof, and fittings).
 - (8) The owner or operator shall keep copies of all records required by d)(2) through d)(8), for at least 2 years.
 - (9) The owner or operator shall keep readily accessible records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel (shall be kept for the life of the source).
 - (10) The permittee shall maintain monthly records of the amount of (gallons per month and total gallons, to date for the calendar year) of material throughput for this emissions unit.
- e) Reporting Requirements
- (1) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.
 - (2) The permittee shall notify the Ohio EPA, NWDO in writing at least 30 days prior to the filling or refilling of each storage vessel for which an inspection is required by d)(2) and d)(5) to afford the Ohio EPA, NWDO the opportunity to have an observer present. If the

inspection required by d)(5) is not planned and the owner or operator could not have known about the inspection 30 days in advance of refilling the tank, the owner or operator shall notify the Ohio EPA, NWDO at least 7 days prior to the refilling of the storage vessel. Notification shall be made by telephone immediately followed by written documentation demonstrating why the inspection was unplanned. Alternatively, this notification including the written documentation may be made in writing and sent by express mail so that it is received by the Ohio EPA, NWDO at least 7 days prior to the refilling.

- (3) The permittee shall furnish the Ohio EPA, NWDO with a report that describes the control equipment and certifies that the control equipment meets the specifications of b)(2)e. through b)(2)m. and d)(2). This report shall be an attachment to the notification of the actual date of initial startup of an affected facility postmarked within 15 days after such date.
- (4) If any of the conditions described in d)(3) are detected during the annual visual inspection required by d)(3), a report shall be furnished to the Ohio EPA, NWDO within 30 days of the inspection. Each report shall identify the storage vessel, the nature of the defects, and the date the storage vessel was emptied or the nature of and date the repair was made.
- (5) After each inspection required by d)(4) that finds holes or tears in the seal or seal fabric, or defects in the internal floating roof, or other control equipment defects listed in d)(4)b., a report shall be furnished to the Ohio EPA, NWDO within 30 days of the inspection. The report shall identify the storage vessel and the reason it did not meet the specifications of b)(2)e. through b)(2)m. or d)(4) and list each repair made.
- (6) If the permittee placed, stored, or held in this emissions unit any petroleum liquid with a true vapor pressure which was greater than 0.754 pounds per square inch absolute, the permittee shall notify the Ohio EPA, NWDO within 30 days of becoming aware of the occurrence.

f) Testing Requirements

- (1) Compliance with the emission limitations in section b)(1) of the terms and conditions of this permit shall be determined in accordance with the following methods:

a. Emission Limitation:
0.99 ton VOC/yr

Applicable Compliance Method:

The permittee shall demonstrate compliance with the annual allowable VOC emission limitation by rim seal loss, withdraw loss and deck fitting loss calculations as determined by U.S. EPA Tanks 4.0 (or the most current version) program with a maximum annual material throughput of 1,654,776 gallons.

g) Miscellaneous Requirements

- (1) None.

13. Emissions Unit Group - Hammermill: P002, P003, P004, P005, P006,

EU ID	Operations, Property and/or Equipment Description
P002	hammermill no. 1
P003	hammermill no. 2
P004	hammermill no. 3
P005	hammermill no. 4
P006	hammermill no. 5

a) This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).

(1) For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.

a. None.

(2) For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.

a. None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operations(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(F)	Particulate matter equal to or less than 10 microns in size (PM10), from emissions units P002, P003, P004, P005 and P006, combined, shall not exceed 0.004 grain per dry standard cubic foot (gr/dscf) and 2.06 lb PM10/hr and 9.02 tons PM10/yr Visible particulate emissions (PE) from the bag house stack(s) shall not exceed 0% opacity, as a six-minute average. See b)(2)a. and c)(1)
b.	OAC rule 3745-31-05(A)(3), as effective 11/30/01	See b)(2)b. and b)(2)c.
c.	OAC rule 3745-31-05(A)(3)(a)(ii), as effective 12/01/06	See b)(2)d.

Final Permit-to-Install and Operate

POET Biorefining - Leipsic

Permit Number: P0106634

Facility ID: 0369000051

Effective Date: 8/18/2010

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
d.	OAC rule 3745-17-07(A)	See b)(2)e.
e.	OAC rule 3745-17-11(B)	See b)(2)e.

(2) Additional Terms and Conditions

a. This permit establishes the following voluntary restrictions for the purpose of establishing legally and practically enforceable limitations representing the potential to emit (PTE). These emission limitations are based on the operation restriction contained in c)(1) which require control equipment:

- i. 2.06 lb PM10/hr and 9.02 tons PM10/yr; and
- ii. Visible PE shall not exceed 0% opacity, as a six-minute average.

All emissions of particulate emissions are PM10.

b. BAT requirements for this emissions unit have been determined to be compliance with the voluntary restrictions established in accordance with OAC rule 3745-31-05(F) [See b)(2)a.]. The voluntary restrictions were intentionally established to be consistent with the BAT requirements under OAC rule 3745-31-05(A)(3), as effective 11/30/01 for two specific purposes as indicated below:

- i. BAT requirements under OAC rule 3745-31-05(A)(3), as effective 11/30/01 would be fulfilled by compliance with voluntary restrictions; and
- ii. The emissions unit will avoid any BAT requirements under OAC rule 3745-31-05(A)(3), as effective 12/01/06 [See b)(2)d.].

c. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to OAC rule 3745-31-05(A)(3), as effective, November 30, 2001, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to ORC changes effective August 3, 2006 (S.B. 265 changes), such that BAT is no longer required by State regulations for NAAQS pollutant less than ten tons per year. However, that rule revision has not yet been approved by U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006 version of 3745-31-05, then these emission limits/control measures no longer apply.

d. This rule paragraph applies once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05 as part of the State Implementation Plan.

This permit to install (PTI) takes into account the use of a baghouse system (with a 100% capture efficiency and a maximum outlet grain loading of 0.004 gr PM10/dscf) to control PM10 emissions, from P002, P003, P004, P005 and P006, combined, whenever these air contaminant source are in operation, as a

voluntary restriction as proposed by the permittee for the purpose of avoiding Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3).

- e. The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(C).

c) Operational Restrictions

- (1) The following operational restriction has been included in this permit for the purpose of establishing legally and practically enforceable limitation requirements which limit PTE [See b)(2)a.]:

- a. This emissions unit shall be vented to a baghouse with a maximum outlet concentration of 0.004 gr PM10/dscf.

- (2) The permittee shall operate the baghouse at all times when any of the following emissions units are in operation: P002, P003, P004, P005 and/or P006.

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the baghouse stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log, as well as the date and time the daily check was performed. If visible emissions are observed, the permittee shall also note the following in the operations log:

- a. the color of the emissions;
 - b. the total duration of any visible emission incident; and
 - c. any corrective actions taken to eliminate the visible emissions.

e) Reporting Requirements

- (1) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.

- (2) The permittee shall identify in the annual PER the following occurrences concerning the inspection and control measure requirements:

- a. All days during which any visible particulate emissions were observed from the stack serving this emission unit; and
 - b. Any corrective actions taken to eliminate the visible particulate emissions.

f) Testing Requirements

(1) The permittee shall conduct, or have conducted, emission testing on the baghouse controlling the following emissions units: P002, P003, P004, P005 and P006, in accordance with the following requirements:

- a. The emission testing shall be conducted within 6 months prior to permit expiration.
- b. The emission testing shall be conducted to:
 - i. demonstrate compliance with the baghouse grain loading of 0.004 gr PM10/dscf.
- c. The following test methods shall be employed to demonstrate compliance with the above emissions limitations: for PM10, 40 CFR Part 51, Appendix M, Methods 201 and 202 and 40 CFR Part 60, Appendix A, Methods 1-4 (for volumetric air flow rate). Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA, NWDO.
- d. The test(s) shall be conducted while the emissions unit is operating at its maximum capacity, unless otherwise specified or approved by the Ohio EPA, NWDO.
- e. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Ohio EPA, NWDO. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA, NWDO's refusal to accept the results of the emission test(s).

Personnel from the Ohio EPA, NWDO shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report of the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Ohio EPA, NWDO within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Ohio EPA, NWDO.

(2) Compliance with the emission limitations in Section b)(1) of these terms and conditions shall be determined in accordance with the following methods:

- a. Emission Limitation:
The baghouse shall achieve a maximum outlet concentration of not greater than 0.004 gr PM10/dscf of exhaust gas.

Applicable Compliance Method:

Compliance with the grain loading of 0.004 gr/dscf shall be demonstrated based on the results of emission testing conducted in accordance with Methods 201 and 202 of 40 CFR Part 51, Appendix M.

b. Emission Limitations:

2.06 lb PM10/hr; 9.02 tons PM10/year

Applicable Compliance Method:

Compliance with the hourly emission limitation was determined by multiplying a maximum grain outlet of 0.004 gr/dscf by 60000 cfm and applying the appropriate conversion factors of 1 lb/7000 gr and 60 min/hr.

Compliance with the annual allowable PM10 emission limitation was determined multiplying the lb/hr emission limitation by a maximum operating schedule of 8760 hrs/yr and dividing by 2000 lb/ton. Therefore, provided compliance with the hourly emission limitation is demonstrated, compliance with the annual emission limitation shall also be demonstrated.

If required, the permittee shall demonstrate compliance with the hourly emission limitation in accordance with Methods 201 and 202 of 40 CFR Part 51, Appendix M.

c. Emission Limitation:

Visible PE from the baghouse stack shall not exceed 0% opacity, as a six-minute average.

Applicable Compliance Method:

Compliance shall be determined according to test Method 9 as set forth in the "Appendix on Test Methods" in 40 CFR Part 60 "Standards of Performance for New Stationary Sources."

g) Miscellaneous Requirements

(1) None.